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1. Friedlaender, A. S., and Friedlaender, S.: Annals of Allergy, 6: 23-29, Jan.-Feb., 1948.

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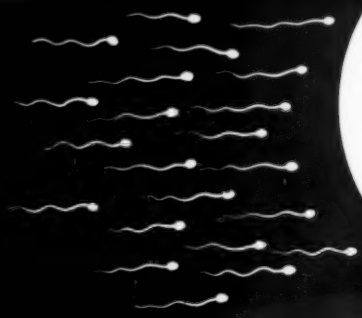

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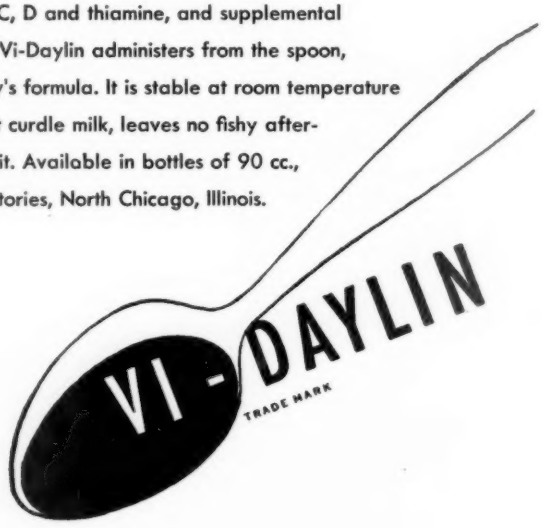

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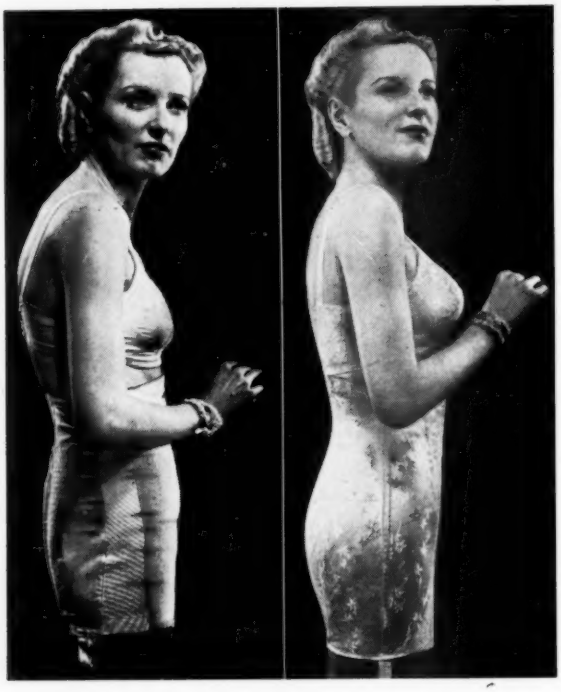

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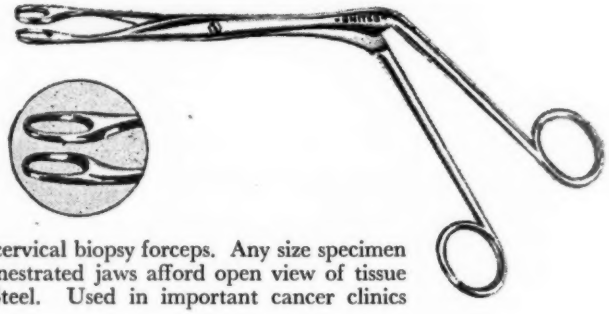

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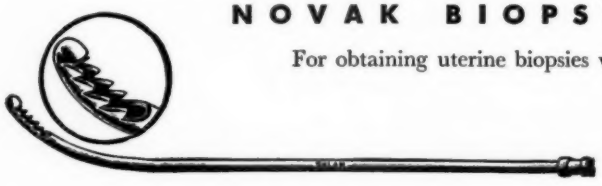

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The Allergic Patient

A Round Table Discussion

Claman: To begin by deploring the fact that, all too often, practitioners of medicine seem to have the fixed idea that allergy means skin-testing would be a negative approach. Therefore, in order to understand what allergy means, we have brought together five specialists, in addition to the allergist, for a brief summary of certain dove-tailing aspects of this broad phase of medicine.

Allergy, the word coined by Von Pirquet, means literally "altered reactivity," and is used to designate a special group of disease manifestations in man. Disease can be caused by the direct action of certain agents, or by the indirect action of certain other agents which exert an effect upon tissue cells because of specific sensitization. Some diseases give evidence of both the direct and indirect action of the causative agent.

Cassirer: Allergic manifestations play an essential role in all phases of childhood. Their importance in making a diagnosis in conditions of the skin, the respiratory organs, and the gastro-intestinal tract are but too often overlooked. Only recently have we stopped talking about allergic symptoms in children and started to consider the allergic child as a whole.

The first signs of allergy are likely to develop shortly after birth, while in a majority of all cases they appear before the tenth year. Growth and development may be interfered with if allergic manifestations develop early in life. The family as well as the child's history will be contributory to the diagnosis of allergy and a thorough physical examination should rule out organic disease. It is the task of the pediatrician to prevent sensitization as far as this is possible by avoiding the most common allergenic foods. Any new food given to an infant should be started in small amounts with slowly increasing quantities, and should be taken away as soon as untoward reactions occur.

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Barthel: Frequently milk appears to be the precipitating factor in an infantile eczema though either boiled or evaporated milk is well tolerated. When some months later the child can take milk without ill effects, is that due to loss of the allergic response or is it due to an improved gastro-intestinal ability to digest the coarser curds?

I understand that the majority of the oozing and crusting forms of erythematous infantile eczema on the fat babies' faces is cured by decreasing the child's caloric intake and that of these plump children only about 50 percent later develop the so-called atopic eczema. In fact, we rarely encounter that type of eczema now.

Cassirer: The nutritional history of the child will help the pediatrician to arrive at a diagnosis. Gastro-intestinal allergies are seen throughout the entire childhood. Regurgitation starts in early life and the older infant is likely to suffer from frequent attacks of diarrhea. Abdominal pain in the allergic child needs careful evaluation as food allergies often simulate appendicitis. Elimination of or desensitization to offending foods will alleviate gastro-intestinal symptoms. Antihistamine drugs have done little for these children. Early immunization for contagious diseases is necessary for

the allergic child, as many of their symptoms may be precipitated by an acute illness.

Casper: Gastro-intestinal allergy, which plays such an important role in childhood, also has to be considered in adults. However, only after a most careful differential diagnosis has been made and all other possibilities ruled out, should a diagnosis of gastro-intestinal allergy be made. Certain cases of gastritis and colitis belong in this group.

Cassirer: As the child grows up food allergies will be frequently replaced by inhalant allergies. We see the child with the constantly stuffed nose; appetite and sleep interfered with. Removal of tonsils and adenoids is often performed without benefit to the allergic child.

Claman: This statement is often made following experience with continuing symptoms in an allergic child after removal of tonsils and adenoids. Examination of the history, the character of tonsils and adenoids, the time of the year when the operation was performed, and the lack of consistent follow-up treatment will give clues to the failure of the measure in these cases. Lateral soft tissue x-rays of the nasopharynx, to determine the degree of encroachment on the breathing space, are helpful. Evidence of tonsillar infection and the type of organisms discovered on culture are also important. If infected tissue is present, deep tissue culture after removal, followed by vaccine therapy, is indicated.

Cassirer: A clear watery nasal discharge is characteristic. A large number of eosinophiles in the nasal smear is accepted as an indication of allergy. Antihistamine drugs are more useful in these cases than in some others. Neosynephrine nose drops may be of comfort, but should be used sparingly.

Howe: Routine use of nose drops should be avoided because sometimes the end result is worse than the condition they are supposed to correct.

Claman: This is a point worthy of emphasis.

Cassirer: Asthma plays an important role in later childhood though some children have their first attack during the first year of life. A thick mucus, which often causes obstruction, is characteristic. Inhaled, ingested, and contact allergens are responsible for the syndrome of asthma in a majority of children. Ipecac in amounts of one half teaspoonful will liquefy the mucus and relieve the child frequently. Epinephrine in 1 to 1,000 solution is valuable. Up to 5 years, 2 to 3 minims are given; up to 10 years, 5 minims. Aminophylline by injection with glucose often helps those children who do not respond to epinephrine. A new potent bronchodilator, Isuprel, seems to be effective if given sublingually in mild attacks. In more severe attacks inhalation of the drug seems valuable. Antihistamine drugs have been disappointing. Almost half of these children lose their attacks after puberty.

Barthel: The theory that the allergies disappear at puberty is open to criticism. The child frequently changes from one sensitization to another type. Therefore it is wiser to control environment during the age when it is more readily done and before complications occur.

Claman: I heartily agree with this point of view.

Casper: The treatment of bronchial asthma in adults does not differ very much from that in children except, of course, for the doses used. Besides trying to eliminate the cause of the disease by desensitization or elimination of offending agents, epinephrine subcutaneously, or aminophylline either intravenously or by suppositories is still the accepted treatment of the acute attack. If a status asthmaticus develops oxygen may have to be given. We prefer a mixture of 80 percent helium and 20 percent oxygen. If sedation is indicated we use demerol 50 mg. either by mouth or subcutaneously with excellent results, because it lacks the depressing factors of morphine.

Some authors, especially a group from the Mayo Clinic, still advocate x-ray therapy to the chest in chronic asthmatics. However, we have never seen conclusive results from such a therapy.

The antihistamine drugs are valuable in cases of true allergic asthma but they are very disappointing when infection is present.

Claman: The choice of a sedative, where indicated, must be made carefully according to the condition and type of the patient and symptoms. Anything which depresses the respiratory center must be avoided.

Casper: Infectious asthma constitutes a vast group which can originate from any focus of infection in the body, usually tonsils, teeth, or sinuses. The body becomes sensitized to the bacteria or to their toxins. Wherever possible, foci of infection should be removed. Autogenous vaccines are widely used in an attempt at desensitization, but not always effectively. In acute cases, penicillin has proved very helpful either by injection or by inhalation.

Barthel: Sulfa drugs and penicillin as well as many of the older stand-bys produce urticaria, edema, and other lesions. True, sometimes the antihistamines are valuable to allay the itching these cause, though bromides and ephedrine and

other older methods will sometimes produce more relief.

Howe: The use of autogenous vaccines made from cultures from the nasopharynx, infected tonsils, or infected sinuses has proved of value in certain selected patients. Regardless of the findings on x-ray, all antra in allergic patients should have diagnostic irrigations.

Claman: I would not subscribe to such a drastic and, in most cases, unnecessary procedure. I think the antra should be washed, and cultures made from the material washed out, only when history and x-rays indicate infection.

Howe: Routine tonsillectomy and adenoidectomy should be removed from the category of treatment for the allergic child. Adenoidectomy frequently suffices to relieve obstruction and chronic discharge, and tonsils should be left in place unless definitely infected. Infected tonsillar tags in adults should be removed.

Many conditions previously of a surgical nature now respond to the use of chemotherapeutic agents and the antibiotics. Acute sinusitis frequently improves with the use of penicillin by injection and by inhalation. However, chronic sinusitis fails to respond well to such treatment and here surgical procedures must frequently be used. When polypi are present, as they frequently are in chronic allergic sinusitis, they must be removed to promote adequate drainage. Deviated septums which interfere with respiration or drainage must be straightened. Chronically infected antra with thickened membranes which fail to clear under irrigations should be subjected to the Caldwell-Luc operation.

Radium to the nasopharynx has been extensively used of late. It should be used only when surgical measures have failed to correct properly excessive lymphoid tissue in the nasopharynx.

The unfortunate and ineffectual results of radical treatment in the past have led to the current concept of conservatism in otolaryngologic treatment.

Casper: Besides bronchial asthma, internal medicine has to consider the allergic aspects of a number of other diseases where the allergic origin is either proved or, at least, strongly suspected. Most important among these are certain forms of so-called allergic headache or migraine. Even though only 5 percent of all cases of migraine prove to be definitely allergic in etiology, allergy has to be considered in every case, and elimination of the offending agent sometimes produces rather dramatic cures. The same holds true for certain forms of epilepsy and Meunier's syndrome. From time to time, attempts are made to link diseases with unknown etiology to all sorts of allergies. In this group belong Buerger's disease, periarteritis nodosa, gout, and all forms of arthritis. However, so far, the results have not been conclusive.

Claman: It is essential to remember that in allergy, as well as in all fields of medicine, the patient, rather than the condition, must be treated, and attacking the cause of the disease is better than offering only symptomatic treatment. Infection must never be overlooked, either as an existing focus, or as a previous condition which sentitized the patient to bacteria or their toxins. This is only one of many reasons for an exhaustive and detailed history, which should cover, in addition to the usual data, minutiae of environmental contacts, previous immunization, medication, cosmetics, "tonics," food habits, personality peculiarities, emotional variations, and hobbies and their contacts. Physical examination, laboratory data, and special examinations and tests, have their importance in establishing an etiological diagnosis and in indicating therapy. Skin tests are of great value if properly used and interpreted. In inhalant allergies, the carefully diluted intradermal test, in the hands of an experienced person, is very dependable. In the presence of dermatitis, the patch test may yield valuable information. It is not common practice to-day for the conscientious specialist in allergy to do what is often spoken of or requested as "complete skin-testing." It is obvious that one could not exhaust the environmental contacts; indeed, both patient and doctor would be exhausted long before such a hypothetical state could be reached. The history gives clues to the type and number of skin tests. There are indications for using skin tests with foods, among them, testing with egg yolk and egg white, in individuals who should receive vaccine prepared in chicken embryos. However, when foods are suspected as causes, food diaries or tests or elimination diets, carefully and reasonably controlled, offer a better guide to those foods contra-indicated, than skin tests. Also, it is obvious that, where a diet is limited in variety, it is necessary to make sure that caloric intake, carbohydrate, fat, protein, vitamin, and mineral requirements are met.

Barthel: Patch tests should be done only on clear skin and resemble as closely as possible the application of the irritant to be tested. The response should be a dermatitis, either wet or dry, resembling the original dermatitis. I stopped using the scratch method some ten years ago and it was interesting to see an article in the *Journal of Investigative Dermatology* on that subject recent-

ly. They had performed similar tests on opposite arms and the tests differed on the same day.

Casper: Bronchial asthma in adults does not offer a very different picture from this condition in children. Again and again, we want to emphasize that not every chest condition that shows wheezing is necessarily "asthma." Foreign bodies in the bronchial tract, enlarged tracheobronchial lymph-nodes, emphysema and bronchiectasis following pneumonia, or tuberculous or non-specific empyema, may occur, in adults as well as in children. In adults, especially of a certain age group, pulmonary neoplasms must be excluded, and cardiac asthma, which is rather rare in childhood, has to be considered. Careful histories, x-rays, and all other diagnostic procedures already mentioned, together with skin tests, will help to establish the diagnosis.

Bakwin: The role of the emotions in the precipitation of asthmatic attacks was accepted without question until the beginning of this century. Recently attention has been directed toward the allergic component and the part played by psychologic factors has been overlooked. The extent to which the emotional factors influence the severity of the asthma varies considerably. In some children, they dominate the picture, in others their influence is minimal. In children the situations which most commonly induce an attack of asthma are threatened separation from the mother, rage, and fear.

The parents of children with asthma show certain traits and attitudes. The mother usually dominates the home; the father is passive. The mother has been characterized as intelligent, efficient, ambitious, authoritative, critical toward her husband and children, lacking in affection but conscientious, overanxious, and apprehensive. The child senses the lack of affection and is emotionally disturbed. He too becomes overanxious and apprehensive. The behavior of the asthmatic child has been described as hyperirritable, overactive, immature, and dependent. Most of these children are abnormally dependent upon the mother, accepting her authority and relying on her to an abnormal degree. The personality of the child with asthma is understandable as a reaction to parental anxiety, indulgence, and oversolicitude.

McDermott and Cobb reported 50 unselected cases of bronchial asthma, in 37 of which they found some emotional component in the production of the asthmatic attack. Twenty of these patients reported that an emotional disturbance precipitated the first attack.

Jensen and Stosser reported the cases of four girls with refractory bronchial asthma who had been referred to the psychiatric clinic for treatment. All four were highly nervous, anxious, and under emotional tension. All improved under treatment and were practically symptom free. The treatment consisted of interviews with the child and sometimes with the mother encouraging the child to be less dependent and helping her to gain insight into her problem.

Metzger was able to produce attacks of asthma, urticaria, and hay fever in several allergic patients on the basis of fear, suspicion, and anger. Relief was obtained by suggestion or explanation.

Cassirer: Maculopapular lesions of the skin which become vesicular and leave the surface moist appear in the early weeks of the allergic baby. They must be differentiated from nonallergic seborrheic dermatitis often seen on the baby's scalp, behind and in front of the ears.

Cow's milk is frequently the offending agent in these early eczemas. Boiled, evaporated milk has proved beneficial to a great number of affected infants while sometimes one has to resort to goat's milk or soy bean preparations. Contact with wool should be avoided. In a great number of infants these early eczemas disappear before the third year.

The child after 3 years of age demonstrates skin lesions of a neurodermatitis. Predilection sites are the antecubital, popliteal spaces, wrist, and neck. Skin tests are valuable at this age and the offending foods should be avoided although care should be taken not to exclude essential foods too long. Crude coal tar ointments are beneficial in this form of eczema. Wool again should be avoided. Antihistaminic drugs seem of little value but may relieve itching.

Barthel: The thin overactive child is the type that has skin reactions caused by primary irritants such as wool, soap, sun or wind, poison ivy, and other substances that produce sensitizations. They will give positive skin tests to these. The removal of these frequently does not produce an improvement in the skin lesions.

Rhus tox acts as an external irritant but I am sure there is also an allergic response that accounts for the spread to parts of the body, after the irritant has been removed, and is caused by scratching. Possibly because of this we have dropped the poison ivy injections in the acute phase. Frequently the injection increases the severity of the attack. On the other hand, some people have a decrease in the severity and number of attacks after several repeated small doses of the alcoholic extracts. There are even pills for this. Others seem to outgrow the sensitivity in time.

Dermatophytosis is associated with an allergic response that may occur on the hands or even be generalized. The use of an extract of the specific fungus or a shot-gun extract does not improve the skin lesion as a rule. A positive skin test can usually be elicited for an indefinite length of time after a fungus infection no longer exists. Therefore, it is not diagnostic of infection. The strange fact is that an injection of this extract will cause pityriasis rosea to vanish. The cause of this disease is unknown.

I have a patient who two years ago had a generalized papular vesicular dermatitis that continued until all soaps were removed from her routine. Her dermatitis recurred this year and in addition there was an urticaria. The total intake of food was cut down leaving her with a simple diet of meat, vegetables, and fruits, and six to eight glasses of water. Her external medications were normal salt solution and a zinc oxide cream. She improved and cleared rapidly. She worked in her husband's bakery and had noticed that when she used flour she sneezed. She was beset with the idea that some cake crumbs that had fallen down her bosom had produced the rash. Reluctantly I did a wheat scratch test that to my surprise turned out to be 3 plus. The following week she flared up with a papular dermatitis, presumably because she had some soapy water spattered on her arms. When this cleared, I repeated the wheat. This time it was negative. It was not until then that she admitted that her husband was starting in business for the third time and again it seemed he was destined to fail. It was difficult to convince her that her problem was more than allergy.

Many allergic reactions are recognizable. These include the depigmentation produced by rubber gloves plus an external irritant, the finger marks on the neck and eyelids due to finger nail polish without any irritation on the fingers, and poison ivy or oak primrose whether due to contact or windburn. These are not the problems. The real problem is when history or skin test is positive, yet the removal of the cause does not improve the condition, or when no history or test gives the lead and the dermatitis disappears only to reappear promptly. Perhaps the patients are allergic to themselves and psychotherapy is the answer.

Bakwin: There have been numerous observations in recent years on the effect of psychotherapy on intractable eczema. In most of these patients, adults and children, there was an allergic background and, in many, skin reactivity. In some instances of eczema associated with bronchial asthma, the eczema as well as the asthma has been benefitted by psychotherapy. More frequently the history is of several years of infantile eczema unimproved by somatic therapy but finally improving spontaneously. The asthma succeeding the eczema has been found to be greatly benefitted by psychotherapy.

Woodhead reported a study on 26 children and young adults suffering from eczema, allergic dermatitis, and papular urticaria. They had resisted the regular treatment but all were cured by psychotherapy. The healing of the skin ran parallel to successful psychologic treatment; some relapses occurred during the treatment. Often problems in the parents affected the child. Woodhead found these children had a distinctive personality makeup —they were gifted, energetic, determined, aggressive, egotistical, sensitive, frightened and insecure.

Rogerson observed 23 children from 1 year to 11 years of age, with what he terms the asthma-eczema-prurigo complex, of whom nine had only eczema and prurigo without asthma. Most of these had received many kinds of ointments with little benefit. With psychotherapy of one year or less all, except the 1-year old, were markedly improved; in four the skin was entirely clear and there were no symptoms; in the other four there was slight residual itching and irritation. The personality of these children he found to be similar to those who had asthma, irritable, aggressive, overanxious, insecure.

Adult patients with eczema, urticaria, dermatographia, even herpes and pemphigus have frequently been relieved by psychotherapy. Often the skin lesions occurred after some emotional trauma, frustration, or disaster and were thought to be "an expression of a flight into illness," or "an attempted retreat from an unpleasant realty situation which required assumption of responsibility." Many of the patients were withdrawn, shy, easily embarrassed, passive, dependent, immature, with a marked feeling of insecurity and inadequacy.

Barthel: Over a period of years we have learned much as well as discarded much. Still the problem is far from solved. All we can say is that we ferret out what we can and gain the patients' confidence so that they can be taught to live with themselves.

Claman: To summarize: Allergic disease may now be roughly classified etiologically as follows:

1. Contact stimulation
2. Heredity
3. Direct or indirect effects of bacterial infection

I exclude, from the list of causes, those purely psychic. Patients who manifest symptoms simulating those of allergic conditions, in which only psychic causes can be demonstrated, should not be classified as allergic, but should be investigated and treated psychiatrically. However, the truly allergic patient may have his condition complicated or aggravated by psychic factors, emotional strain, or fatigue. There may also be a combination of causes, or diverse responses in the same patient. For example, pollen sensitivity may cause skin eruptions as well as hay fever, while an upper respiratory infection may add bacterial sensitivity to the pollen sensitivity.

The foregoing discussion, while it makes no attempt to cover this large subject in exhaustive detail, shows that physicians treat the allergic patient with an approach that differs according to their experience in different fields of medicine. However, there are certain definite fundamentals in the management and treatment of the allergic individual, which must be accepted as necessary if successful results are to be achieved.

Endometriosis of the Appendix in Conjunction with Pregnancy

Frances L. Bogatko, M.D.

ENDOMETRIOSIS IS a common pathologic entity, and the knowledge that it may be found in extragenital areas has made it a condition of general medical interest.

As early as 1860 Rokitansky described a condition usually known as adenomyosis, adenomyoma, or internal endometriosis. Cases of adenomyoma of the uterus associated with pregnancy and showing decidual reactions have been reported by Williams (1905), Cullen (1908), Asheim (1923), Sampson (1923), and numerous other gynecologists. A careful search through the literature reveals thirty-five reported cases of endometriosis of the appendix, but no records of any case could be found in which pregnancy co-existed with endometriosis of the appendix. Usually there is a co-existing endometriosis of the ovary which is much more common than cul-de-sac or rectovaginal septum endometriosis. However, the intestinal tract is highly important as an extragenital site for this condition, and what was once of interest chiefly to the gynecologist and pathologist is now of importance to the internist, general surgeon, and urologist.

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Case Report

A 32-year-old white, pregnant Czechoslovakian woman was admitted to the New York Infirmary on November 2, 1947, complaining of pain in the right lower quadrant. The pain, which was colicky in character, had begun suddenly four hours before admission and recurred with increasing severity. She complained of nausea and constipation, but no vomiting. Except for her marital history, her previous history was non-contributory. She had never had any serious illnesses or operations. The onset of her menstrual periods was at 15 years of age; they were always regular, painless, and lasted two to four days. There was never any intermenstrual bleeding or discharge. She had been married three and a half years and had become pregnant 18 months after marriage, but had a spontaneous abortion in the second month of her pregnancy. Her last menstrual period was sometime in May, 1947. There was no history indicative of disease of the biliary or urological systems. On physical examination the patient was found to be in good general condition. The relative findings were confined to the abdomen which was enlarged. The fundus of the uterus could be palpated at a point just below the umbilicus. There was slight rigidity and definite tenderness in the right lower quadrant, more marked over McBurney's point. No rigidity or tenderness could be found elsewhere on the abdomen or back. Her blood pressure was 120/80, the temperature 99 F. Urinalysis showed no sugar or casts, but a faint trace of albumin, and the specific gravity was 1.028. The hemoglobin was 80 percent; the red blood count 4,200,000; and the white count 12,000, with 79 percent polymorphonuclear cells, 17 percent lymphocytes, 3 percent eosinophiles, and 1 percent mononuclear cells.

A diagnosis of early acute appendicitis was made and an operation performed, using a McBurney incision. A small amount of dark brown fluid was present in the abdomen and was cultured. The appendix was about two inches long and appeared

quite normal except for the distal third, which was slightly enlarged, roughened and bluish in color, and appeared to have suffered trauma. There was a small round discrete bluish nodule about 1 cm. in diameter near the tip.

The tip of the appendix had probably been adherent to the cecum and had been torn away, as evidenced by a rent in the cecal serosa. (This may have accounted for the abrupt onset of complaints). This was immediately repaired, after which the appendix was removed. Great care was taken to avoid any manipulation of the uterus which filled the entire lower half of the abdominal cavity, and no attempt was made to examine the right tube and ovary. The patient was placed on penicillin, sedation by morphine, and proluton daily. She was allowed out of bed on the third postoperative day, made an uneventful recovery, and was discharged on the tenth postoperative day. The culture of abdominal fluid was reported sterile. The pathologic report was "Serosal endometriosis of the appendix."

On February 2, 1948, the patient was admitted to the Obstetrical Ward. She was at term and was having occasional contractions. Pelvimetry was done and reported as follows: "The inlet is gynecoid, but with anteroposterior flattening especially at the posterior segment. The fetus is in L.O.P. position and of average size. The promontory is forward and the sacrum well curved. The anteroposterior bore is slightly divergent. The side walls are divergent and the arch is wide at the base and rather deep. The pelvis is deep. There is no room to spare at the inlet, but suggest trial of labor".

The patient was given trial of labor, but engagement did not occur and a low flap cesarean section was done. During the operation it was noticed that generalized endometriosis was present involving areas on the pelvic walls, adnexae, broad ligaments, and uterus.

The patient had an uneventful postoperative course and was discharged on the ninth postoperative day. She has been followed subsequently, and has not as yet complained of abdominal pain or other symptoms.

Discussion

Since endometriosis co-existing with pregnancy is comparatively rare, it is of interest to note the findings reported in clinics where a series of cases of endometriosis has been observed. In the Fallon Clinic, where 200 cases were studied, only six entered the hospital with that diagnosis. More than two-thirds of these patients had never had a child. However, more than 59 patients had had one child, and 13 had had five or more children. Fourteen women had been pregnant within five years before discovery of the disease. Several had had miscarriages early in pregnancy. In this series of 200 cases, only 10 had a co-existent pregnancy.

Occasionally appendical endometriosis may be asymptomatic. In the case reported the adherent tip of the appendix had evidently torn away from the cecum producing the abdominal pain, tenderness, and rigidity. Endometriosis of the uterus in pregnancy may cause very serious complications, such as atonic postpartum hemorrhage as reported by Sachett and Szener and Schweitzer, and uterine rupture as reported by Richardson, Schafer, and others.

Six theories have been promulgated to explain the diversity of endometrial implants and it is the consensus of opinion that perhaps any one of these theories might explain certain cases, but by far the majority of such lesions result from regurgitation of endometrium through the tubes. Leo Loeb, in a discussion of the endocrine system, has described these theories briefly.

1. The Congenital Theory, first advanced by Von Recklinghausen, which postulates that because of the close relationship between the wolffian and mullerian systems in the early development of the genital tract, embryonic rests have the potentiality of developing into this tissue and morphologically and functionally simulate endometrial tissue. More recent work has discredited the appreciability of this theory except perhaps in very rare cases.

2. The Mucosal Invasion Theory of Cullen is based on demonstrations of endometrial tissue growing down into the myometrium as far down as the peritoneal coat. Although glands and stroma are usually present in this invasive tissue, the glands may be absent and only stromatic tissue invade the wall. In the case of concomitant lesions, such as myomata, hyperplasia of the endometrium and hypertrophy of the uterus with coarse trabeculations of the muscle tissue predispose to the growth of the hyperplastic endometrium into the interstices.

3. The Serosal Theory was first advanced by Iwanoff and is championed by R. Meyer and Novak. It is based on the embryologic fact that all of the epithelium of the female generative tract is müllerian, which has a common ancestor with that of the serosal endothelium, namely the mesenchyme. Under hormonal or other stimulation, this less differentiated serosal tissue has the potentiality of undergoing further development and forming tissue with the characteristics of müllerian epithelium. Novak believes that this theory is adequate to explain this lesion in any location.

4. The Implantation Theory was advanced by Sampson, who believes that at the time of menstruation, particles of endometrium are regurgitated through the tubes and become implanted in a foreign location, usually in the ovaries at the site of the tubal attachment. This theory explains the majority of implants but does not preclude the possibility by any of the other theoretical methods.

3. The Metastatic Theory was advanced by Halban and Sampson, who have definitely shown endometrial tissue in lymphatics and venous chan-

nels. This is a logical explanation of implants found in the vulvar and inguinal regions.

6. Invasion of Tubal Epithelium Theory was advanced by Everett and others who recently demonstrated rather clearly that the mucosa of the tube may invade the tube wall or that fragments may be broken off and implanted on the ovaries. Everett postulates that tubal epithelium may undergo metaplasia and form endometrial tissue.

It is well known that after the destruction of ovarian tissue either by radiation or by extirpation the endometrial tissue regresses in much the same manner as at the physiologic manifestation, the climacteric. In young women conservative surgery, such as resection of the ovaries and freeing of adhesions, is justifiable and fairly satisfactory. If there is further growth of this ectopic endometrium, producing disability, then one can always irradiate the ovaries, thereby causing a regression of the endometrial tissue. In women past 35, in the presence of chocolate cysts, bilateral oophorectomy should be done, and if there is indication of disease of the uterus or tubes they should be removed also. In women near the menopause without large pelvic masses, irradiation either by radium or roentgen rays is sufficient. Roentgen rays are preferable unless there is some local lesion in the uterus indicating radium application. It should be noted that in rare instances misplaced endometrial tissue takes on an autonomous growth after ovarian destruction and this endometrial tissue has all the potentialities of malignant development that normal endometrium has. Judging by the number of cases reported in the literature it is becoming more and more evident that many primary adenocarcinomas of the ovaries develop from endometriosis of that organ. One case of spindle cell sarcoma was reported as originating from ectopic stromal cells in the rectum. There are numerous recorded case reports of the use of hormones in the treatment of endometriosis and it is evident that, in properly selected cases with careful dosage and supervision, satisfactory results may be obtained.

Since our knowledge of endometriosis has been greatly increased in the past decade, every effort should be made to diagnose this condition and treat it in the most effective manner.

Reference

Sampson, J. A., Perforating hemorrhagic (chocolate) cysts of ovary, their importance and especially their relation to pelvic adenomas of endometrial type, Arch. Surg. 3:245, Sept. '21.

Waugh, J. M., Endometriosis, Journal Lancet 61:24-27, Jan. '41.

Fallon, J., Brosnan, J. T., and Moran, W. G., Endometriosis; 200 cases considered from viewpoint of practitioner, New England J. Med. 235:669-673, Nov. 7, '46.

Milnor, G. C., and Tilden, I. L., Endometrial cyst of groin associated with decidual reaction in appendix, Am. J. Obst. and Gynec. 44:324-330, Aug. '42.

Loeb, Leo, Am. J. Obst. and Gynec. Robert Tilden Frank Anniversary Volume, pp. 189-99, '37.

Machado, L. M., Endometriose do apendice, Revista de Ginecologia e d'Obstetricia 42:70-76, Jan. '48.

Sutler, M. R., Endometriosis of intestinal tract, Surgery 22:801-805, Nov. '47.

An Adolescent Gynecological Clinic
Pertinent Observations

Hilda Fliegel, M.D.

In the average hospital, the adolescent girls represent the "lost tribe" of medicine. They are too old for the Pediatric clinic, and too young for the adult Medical and Gynecological clinics. To fill this need, there was established in the Pediatric Department of the New York Infirmary, a clinic for the adolescent patient. The age of admission has ranged from 11 to 18 years. Should the mental, emotional, or menarchal state warrant, younger girls would be admitted. The upper level of 18 years was arbitrarily set, as that represents

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the age of the average high school graduate. As more of the girls were seen, the symptoms and findings prompted us to make this report, and outline further trends for study.

During 1948 and 1949, 42 girls were admitted to the clinic. Routine complete blood counts, Wassermanns, basal metabolic rates, urinalyses, and Papanicalaou vaginal smears were done. Each physical examination was thorough, and included careful inspection of the external genitalia and a rectal examination. The patients and their mothers were co-operative, so that rectal examinations could be done on all patients.

The following are the symptoms and combination of symptoms with which these girls presented themselves.

Primary amenorrhea (14 - 16 years)	3
Dysmenorrhea	19
Dysmenorrhea and menorrhagia	1
Dysmenorrhea and irregular menses	1
Dysmenorrhea, irregular menses, and acne	1
Dysmenorrhea and overweight	2
Menorrhagia	1
Menorrhagia and obesity	1
Menorrhagia and irregular menses	1
Secondary amenorrhea	3
Secondary amenorrhea and overweight	1
Irregular menses and hypertrophied breasts	1
Overweight	3
Constipation	1
Rectal pruritis	1
Vaginal discharge	1
No symptoms (routine physical examination)	1

Physical examination brought out only two defects; one girl had a juvenile epiphysitis, and another girl, a typical dyspituitary amenorrheic, showed no signs of secondary sex characteristics. No hymeneal defects were seen. The vaginas were patent in all cases, as the glass tubing used in the vaginal smears could be introduced easily. On rectal examination, we found a palpable right ovary in one patient; in the others, the findings were mainly of hypoplastic or infantile types of fundi and cervices. Rectal examination in all cases revealed some tissue indicative of the presence of internal genital organs.

The laboratory reported no positive Wassermanns, no severe anemias, and no gross urinary disease. The basal metabolic rates were all low, varying from -3 to -32 in 40 of the 42 girls. This is even more significant in that the girls with menstrual complaints presented the greater proportion of lower rates. These rates might conceivably have been lower had we been able to hospitalize these patients; as it was, they traveled in from all parts of the city on the morning that the test was performed.

Of the vaginal smears, none was positive. In the three cases of primary amenorrhea, two smears showed no cornification at all with many deep basal cells, the other showed only scant cornification on repeated smears. In the cases of secondary amenorrhea the vaginal smears showed scant to good cornification, but no basal cells. The remaining smears showed only normal variations. Cholesterol (blood) determinations were done on some of the girls, but are not presented as they were obtained after thyroid medication had already been given.

Definite conclusions are not being attempted in this paper, as the group is too small, and the exact and correlated findings of thyroid and pituitary dysfunction, as evidenced by cholesterol levels, bone age, x-rays, pituitary x-rays, specific dynamic action, etc., have not been determined.

For a precise evaluation of the observations we have made, a group of normal adolescents should be checked with a new group of patients presenting symptoms related to menstrual dysfunction. A "new group" is necessary, as all of our girls have been receiving some type of glandular medication, the greatest number, of course, thyroid therapy; and improvement in the amount of cornification of vaginal smears was noted. In these girls weekly smears, before thyroid therapy was begun, showed very little change in the smears. This should also be re-checked.

To those of us who do extensive work in sterility, infertility, and endocrine imbalance in the adult, the recognition and prompt treatment of any of the menstrual irregularities in the adolescent girl (as evidenced by the first 14 complaints) are of utmost importance.

Appendicitis in Pregnancy

Jeanne Carbonnier, M.D., and Frances Shostac, M.D.

MANY WOMEN COMPLAIN of pain in the area of the appendix during pregnancy, but true appendicitis is uncommon. When it does occur it is of the utmost importance that diagnosis be made early and operation performed at once as the prognosis is more serious than in non-pregnant women. Waiting is dangerous for the appendix then ruptures easily and general peritonitis sets in rapidly.

A few years ago both surgeons and obstetricians alike had marked reluctance to operate for fear of losing the fetus, but although abortion or premature labor may occur, neither is likely to follow if the patient is operated upon at the onset of the attack and has proper postoperative care. The earlier the attack in pregnancy and the sooner the intervention, the better the outcome.

It is not always easy to diagnose appendicitis in pregnancy, especially after the fifth month, as x-ray plates show the enlarging uterus displacing the appendix upward and outward and the symptoms are deceiving. It must be differentiated from an ectopic pregnancy, acute salpingitis, twisted ovarian cyst, ureteritis, and ureteral stones. A complete blood count is the most valuable help in making the diagnosis.

If there is a history of previous attacks of appendicitis, it is safer to operate even when in doubt, as adhesions may bring on an acute attack, and if the patient is near term, labor may rupture an abscess or an adhesion and generalized peritonitis may follow rapidly. Statistics show that 40 percent of pregnant women with a perforated appendix and peritonitis die, as do 25 percent of women with acute appendicitis in the last trimester of pregnancy. One should bear in mind that the mortality rate rises if labor starts during an attack of appendicitis.

I have had during the past few years, four cases of appendicitis during pregnancy, all four being diagnosed early, and appendectomy performed at once with the woman recovering and being delivered at term or near term of a living baby. None of these patients had much elevation of temperature, palpation in all of them revealed tenderness at McBurney's point, followed by spasm and rigidity later on. Reports of these cases, complete with blood counts, will give a clear idea as to how we arrived at the diagnosis. In the postoperative period, all four patients had Proluton injections daily.

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CASE I: M. D., white female, French born, 25 years old, gravida I, para 0. Two years before the beginning of her pregnancy, she had an attack of appendicitis and had been advised to have an appendectomy, which she refused. Her last menstrual period was September 17, 1940. Since the beginning of her pregnancy she had frequent vomiting and some occasional pains in the right lower quadrant. These became suddenly worse at three months. She developed severe vomiting and pain in the epigastrium and was admitted to the New York Infirmary. There was constant tenderness at McBurney's point with inconstant spasm and rigidity. The temperature was 97.8 F; pulse, 88; respirations, 20. The blood count was: Red blood cells, 4,520,000; White blood cells, 7,500; polymorphonuclears, 77 percent; lymphocytes, 16 percent; monocytes, 2 percent; basophiles, 1 percent. A diagnosis of subacute appendicitis was made and appendectomy performed, December 28, 1940. The appendix was found long, not congested, with a double fold of peritoneum about one and a half inches extending from the last one and a half inch of ileum to the last one and a half inch of the base of the appendix. This band was dissected free at its junction with the appendix. The postoperative diagnosis was mechanical appendicitis with congenital band. Pathologic report: The appendix measures 7.5 cm. in length. The serosa covering it is slightly rough and shows cut surfaces of fibrous adhesions. On section through the tip the diameter of the appendix is 7 mm.; the lumen is obliterated; at the proximal portion, the diameter is 8 mm., the lumen is 3 mm. and is filled with formed feces. There is a small hemorrhagic area in the wall at the proximal end of the appendix. Microscopic examination showed obliterative changes, at this age indicating a previous inflammatory episode.

Recovery was uneventful and afebrile. The pregnancy continued to term at which time the patient was delivered spontaneously of a living male child.

CASE II: B. M., white woman, French born, 25 years old, gravida III, para II. Personal history was not contributory, except for chronic constipation of two years duration and frequent amenorrhea of two or three months. The two previous deliveries were by forceps. Since she missed her period, the patient had had daily attacks of vomiting but did not pay much attention to them, as she claimed she had had simi-

lar trouble for the whole duration of her two previous pregnancies. However, when about 11 weeks pregnant, she developed a pain in her right lower quadrant extending across the abdomen. She did not report this until five days later when she came for her obstetrical check-up. She then had marked tenderness at McBurney's point but no spasm or rigidity. A vaginal examination revealed marked tenderness in both fornices. The fundus was about the size of an eleven weeks pregnancy. The rectal examination was negative. The temperature was 99 F, pulse 104, respirations 22. The case was diagnosed chronic pelvic inflammatory disease with exacerbated peri-appendicitis and the patient was sent to the New York Infirmary. In the evening of the same day, the symptoms became more apparent. There was marked tenderness at McBurney's point with spasm on both sides, connected with the uterus. She was kept in bed with an icebag on her abdomen. The urine was negative, three days later the culture was negative. On admission the blood count was: Hemoblogin 74 percent; Red blood cells, 3,200,000; White cells, 11,700; polymorphonuclears, 81 percent, lymphocytes, 17 percent, mononuclears, 2 percent. The following day, the pelvic inflammatory disease had subsided but there was still pain at McBurney's point. Vomiting and nausea were no longer present. The blood count was: White blood cells, 7,800; polymorphonuclears, 68 percent; lymphocytes, 16 percent; monocytes, 3 percent. The sedimentation test: Index volume: 26 percent; corrected sedimentation index, 0; rate of fall: 0.42; rate per hour: 22 mm. For the next two days, there was still some tenderness at McBurney's point, and it was decided to operate upon the patient with general anesthesia. At operation both ovaries and tubes were found to be normal. The appendix was small, not injected, and apparently not inflamed. The postoperative diagnosis was: Interval appendicitis. Pathologic report: The appendix is 6 cm. long; it is covered by smooth and pale serosa. On section through the tip the diameter is 5 mm., the lumen is 1 mm. and is filled with fecal material. The diameter at the proximal portion is 6 mm., the lumen 2 mm. and also filled with fecal material. The mucous membranes and the wall of the appendix are pale. Microscopic examination showed fibrosis of submucosa of the appendix.

The patient made an uneventful and afebrile recovery and was delivered 5 months later of a living male infant weighing 4 lbs. 15 oz., at the thirty-seventh week of gestation.

CASE III: A. S., white female of Italian descent, 35 years old, gravida II, para I. The patient stated that her first child had been delivered five years before this pregnancy by high forceps. The second pregnancy was uneventful until the thirtieth week, when she complained of what she thought were labor pains, more pronounced in the right lower quadrant. She was admitted to the New York Infirmary. Her temperature was 100 F. She had uterine contractions, the fetal heart was in the left lower quadrant; rate 145, of good quality. The elevation of temperature was explained by an upper respiratory infection, for which she had been recently treated. There was no vomiting, no nausea, but she had some tenderness at McBurney's point, with no spasm or rigidity. The following morning the tenderness had increased. There was nausea and vomiting with occasional uterine contractions. The temperature was 99.4 F, pulse 88, respirations 20. The urine showed a very faint trace of albumin and a trace of sugar. The blood count was: Red blood cells, 3,820,000; White blood cells, 9,300; adult polymorphonuclears, 64 percent; immature polymorphonuclears, 22 percent; lymphocytes, 12 percent; monocytes, 2 percent. A diagnosis of early appendicitis with no peritoneal irritation was made. The same afternoon there were rebound tenderness and spasm at McBurney's point. On examination the rectum was not ballooned; the cervix was 2 cm. long, closed; there was slight tenderness in both fornices, no bulging. An appendectomy was performed the following day, under continuous spinal anesthesia. A right rectus incision was made; the rectus fibers split. The appendix was located with some difficulty, bound near the brim of the pelvis, and bent doubly on itself. Considerable difficulty was encountered in retracting the uterus on account of very large varicosities in the broad ligament. One of the varicosities was ruptured. It was clamped and ligated with a simple ligature. The appendix was removed. The ligature about the appendix and that about the mesentery were tied together. The postoperative diagnosis was acute appendicitis or mechanical appendicitis.

Pathologic report: The specimen measures about 5 cm. in length. It is pale in color; attached to the proximal end there is a bean shaped brown tag of tissue about 5 cm. in size. There is a fatty tag attached along one border. On section the lumen contains feces. Microscopic report: fibrosis of submucosa, hemorrhage into mesappendix.

Two days postoperative the patient developed lobar pneumonia, from which she recovered. She was delivered of a living male child at term by cesarian section because of cephalo-pelvic disproportion.

CASE IV: N. M., white woman, 27 years old, of Polish descent, gravida I, para 0. Last regular menstrual period was on January 2, 1948. One month later she had some vaginal bleeding which cleared after bed rest. When sixteen weeks pregnant, she developed some pain in her right lower quadrant with no nausea or vomiting. Upon examination there was marked tenderness at McBurney's point, no spasm or rigidity. On vaginal examination the cervix was closed; the whole lower uterine segment was tender. Rectal examination was negative. The fundus was one and a half fingers below the umbilicus and very tender. The patient was sent to the New York Infirmary, and an emergency blood count was made. White blood cells, 7,900; immature polymorphonuclears, 7 percent; mononuclears, 3 percent; basophiles, 2 percent; adult polymorphonuclears, 68 percent; lymphocytes, 19 percent; eosinophiles, 1 percent. Urine was negative. Temperature 98.8 F, pulse 90, respirations 16. The diagnosis of subacute appendicitis was made and the patient was operated upon with the usual procedure. At operation, the appendix was found with the proximal third completely buried beneath a band which attached it to the posterior wall of the cecum. The tip was floating free and injected. The right ovary and tube were not seen and nothing abnormal was felt in this region. Pathologic report: The specimen consists of an appendix measuring 8 cm. in length and 0.5 cm. in diameter. It is covered by smooth glistening, pale gray serosa. The lumen is patent throughout and contains a small amount of feces. Microscopic examination showed subacute appendicitis of mild degree.

Recovery was uneventful and afebrile. A few days later the patient complained of incontinence of urine and of pink discharge. It was found she was not incontinent but that there was a leakage of amniotic fluid. She was delivered spontaneously at 33 weeks of a living male infant.

In addition to the above cases in the private practice of Dr. Carbonnier, the three following cases seen on service are reported.

CASE V: M.T., 26 years old, primipara, in the seventh month of pregnancy. She had complained of abdominal pain, nausea, and vomiting. She had had no bowel movement for five days and had been told that she had false labor. When seen on the fifth day of illness by one of the staff doctors she was immediately hospitalized.

On admission the patient appeared to be in great pain; she had an anxious facies, the pulse was rapid and of fair quality. Rectal temperature was 100 F. The abdomen was tense, tympanitic and tender all over, especially so in the right lower quadrant. The uterus was firm but not board-like. The fetal heart sounds were of good quality, the rate 140.

Blood count: Red blood cells, 4,100,000; hemoglobin, 78 percent; White blood cells, 11,600; adult polymorphonuclears, 77 percent; immature polymorphonuclears, 9 percent; lymphocytes, 14 percent. Sedimentation test: fall per hour 53 mm., rate of fall 2.4., corrected sedimentation index 1.6 mm., cell volume 37 percent. On rectal examination, the cervix was found to be 2 cm. long and closed.

The preoperative diagnosis by the obstetricians and the surgeon was acute surgical abdomen. Uterine and urinary tract disease were believed ruled out. The patient was operated on five hours after admission. An acutely inflamed ruptured gangrenous appendix was removed. It was located back of the cecum, doubled upon itself, with a fecolith in the middle of its length and a perforation over the fecolith. The patient received 500 cc. of blood before leaving the operating room and was put on penicillin medication. On the first postoperative day she was cyanotic and had a distended abdomen; temperature was 100 F., pulse 130, respirations 40 and labored. The fetal heart was not heard at this time. The patient's condition became worse. She was placed in an oxygen tent with a Wangensteen tube to relieve the distention. With this treatment, a Murphy drip, and intravenous fluids, her condition improved. She was transfused twice, 750 cc. of blood in all. The highest postoperative temperature was 100.6 F., but the pulse remained around 136 until the third postoperative day when she was delivered of a living female child by breech extraction. The postpartum course was practically normal. She was discharged on the fourteenth postoperative day in good condition; the incision was well healed by first intention. The hemoglobin on the fifth postoperative day was 82 percent.

CASE VI: E.B., a 43 year old gravida III, with two living children, was first seen in the prenatal clinic on November 16, 1944: her due date was May 10, 1945. She was a diabetic, known as such for one year previously, controlled by diet and 20 units daily of protamine zinc insulin. Her father, deceased, had been a diabetic. Previous history otherwise negative. Physical examination revealed cardiac arrhythmia and severe varicose veins of the legs. She was referred to the cardiovascular and diabetic clinics in consultation and to the medical ward for work-up of her diabetic status and its control. The electrocardiogram revealed premature contractions, otherwise no abnormalities, and an x-ray plate of her heart was negative.

On March 16, 1945, she was admitted to the obstetrical ward for further check-up and standardization of her diabetic condition. On admission she stated that for twelve hours previous she had been having intermittent cramping pains in the back and in the suprapubic region, with some nausea and vomiting. She had however walked into the ward and lay quietly in bed while her history was being taken. Her skin was cool; she was not dehydrated. Oral temperature at 8 p.m. was 99.8 F. Tenderness was present on deep palpation just below the edge of the right costal margin anteriorly. She had vomited her lunch and ate no dinner. A medical consultant thought she had a gastro-intestinal upset and advised watchful waiting. During the night suprapubic pains increased in severity accompanied with nausea. She began to have uterine contractions. The abdomen soon became board-like, tender all over, especially so in the right lower quadrant. The white blood cells were 13,500. Neutrophiles: adult 64 percent, staff 15 percent, lymphocytes 12 percent, monocytes 3 percent, eosinophiles 1 percent. A consultant (Dr. Hervey Williamson) was called, whose diagnosis was accidental hemorrhage with possibility of peritonitis. She was operated on at 4:30 a.m. March 18, 37½ hours after admission. On opening the abdomen, free pus was found in the peritoneal cavity; the appendix was gangrenous. It was removed, and drains were inserted in the abdominal wall. She was given penicillin immediately, 20,000 units every 3 hours. The temperature on the second and third days went to 101.8 F., on the fourth day it was 100 F. and on the fifth day, 101 F. After this it remained at a normal level.

The preoperative blood pressure was 114/60. Blood sugar rose from 188 to 333 mg./cc., with a trace of acetone in the urine.

The day after operation she went into mild labor and two days later was delivered of a premature, stillborn, macerated male fetus of about 7 months' gestation.

The diabetes was treated with regular insulin, occasional protamine zinc insulin, and diet.

The patient was discharged April 11, 1945. When seen in postpartum clinic on May 2, 1945, the operative scar was well healed, the abdominal wall relaxed. She had a cystocele and a rectocele, the uterus was well involuted, the diabetes controlled.

CASE VII: C.R., a 37-year-old Porto Rican woman, gravida II, para I. She was seen in prenatal clinic in January, 1946, at which time she was about five months pregnant, her due date being May 5, 1946. She was small and underweight but her pelvic measurements were fairly good; her first baby was born normally in 1936. Her hemoglobin in January was 71 percent, in February 64 percent, and in March 65 percent. Her last visit to the prenatal clinic was on April 9. She had no complaints, there had been a satisfactory gain in weight, urinalysis and blood pressure were normal. On March 3, a pelvic check-up revealed that the cervix was boggy and friable and bled easily.

On April 11, she was admitted to the hospital. She complained of right abdominal pain of two days duration, nausea and vomiting which had started before the onset of pain, and difficulty with moving her right leg.

On admission, palpation revealed tenderness in the right lower quadrant and in the right lumbar region. The blood pressure was 112/50, pulse 96, temperature 100.2 F. The white cell count was 22,000, with polymorphonuclears 92 percent, lymphocytes 8 percent. The fetal heart was heard in the right lower quadrant, the rate 160 to 170. A catheterized specimen of urine had a trace of albumin, a trace of sugar, and 35 to 40 white blood cells per high power field. The tentative diagnosis was: (1) appendicitis; (2) renal disease.

The patient was quiet the remainder of the night. At 11:30 a.m. the abdomen was tense, and acute appendicitis was diagnosed. She had suprapubic pain as well as pain in the right lower quadrant. Her white cell count had risen to 25,000, with polymorphonu-

clears, adult 90 percent, immature 4 percent, small lymphocytes 4 percent, large lymphocytes 1 percent. Hemoglobin 83 percent. Red blood cells 4,200,000. A catheterized specimen of urine showed albumin +, no sugar, red blood cells 3 to 5 per high power field, 10 to 12 scattered white cells, granular casts. Her temperature was 99.2F, pulse 100, respirations 20. She had less pain. After a few hours of comparative comfort, she again had constant pain in the right lower quadrant and right flank, and intermittent suprapubic pain. At 3 p.m. the white cells numbered 22,900. Temperature was 99 F., pulse 106. She received 1000 cc. of glucose intravenously at 1:15 p.m. At 6 p.m. labor pains began and she was in acute distress wtih pain. The uterus relaxed between contractions. The upper abdomen became distended and tympanitic. There was acute tenderness, both superficial and deep, in the right lower quadrant.

At 10:20 p.m. of the day following her admission, the patient was operated upon and a small amount of cloudy fluid was found in the peritoneal cavity. As the appendix was underneath the fundus, cesarean section was performed. A live 7-lb. baby was extracted and the placenta removed. Because of the infected fluid in the peritoneal cavity, a Porro section was performed. As the right ovary appeared to be injured a right salpingo-oophorectomy was done. After the pelvic work was finished the appendix was located just above the promotory and to the right of it, fixed to the posterior abdominal wall, and curled upon itself. Adhesions were freed and the appendix removed with a carbolic knife. Sulfanilamide, 6 gm., was deposited in the abdominal cavity. The patient received a transfusion of 500 cc. of whole blood while still on the operating table. She made a good recovery on penicillin and sulfadiazine. The temperature rose to 102 F. on the first postoperative day, between 100 and 100.8 for the next two days, 99 to 100 until the thirteenth postoperative day, when it dropped to 98.7 and stayed normal thereafter. There was a Bacillus coli infection of the wound but when she was discharged on the eighteenth day after operation there was only slight oozing from the incision.

The pathologic report was as follows: 1. Full term placenta. 2. Perisalpingitis and perioophoritis. 3. Gangrenous appendicitis.

Bibliography

Babler, E. A., Perforative appendicitis complicating pregnancy, J.A.M.A. 51: 1310-1314, Oct. 17, '08.

Baer, J. L., Reis, R. A., and Arens, R. A., Appendicitis in pregnancy, with changes in position and axis of normal appendix in pregnancy, J.A.M.A. 98: 1359-1364, April 16, '32.

Cocke, N. P., and Mason, J. M., Management of acute appendicitis developing in latter weeks of pregnancy, J.A.M.A. 75: 95, July 10, '20.

DeLee, Joseph B., and Greenhill, J. P., Principles and Practice of Obstetrics. Ninth edition. Saunders, 1947.

Titus, Paul, The Management of Obstetric Difficulties. Third edition. Mosby, 1945.

Wilson, R. A., Acute appendicitis complicating pregnancy, labor, and puerperium, Surg., Gynec. & Obst. 45: 620-628, Nov. '27.

Rheumatic Fever with Multiple Manifestations

Catherine Lodyjensky, M.D., and Valentina P. Wasson, M.D.

A CASE OF rheumatic fever seen on the Pediatric Service of the New York Infirmary is presented because of the multiple manifestations of rheumatic involvement which occurred.

Case Report

M.K., a 13 year old white girl, was admitted to the New York Infirmary, March 11, 1947, her chief complaint being pains in both knees and left elbow, a skin rash, and a temperature of 104 F. Two weeks before admission she had an attack of pharyngitis with cervical adenopathy and high fever. One week later a skin rash appeared, which was diagnosed as erythema multiforme, and her temperature rose to 104 F. The rash faded, but joint pains developed and she was admitted to the hospital. Her past history was irrelevant, except for tonsil and adenoid removal at 5 years of age, until 1945, when she contracted scarlet fever, which was followed shortly by rheumatic fever, manifested by swollen knees, elbows, and toes. A systolic apical murmur developed soon after. Her general health had remained fairly good in the interval and she attended a health class.

The father died of Hodgkin's disease shortly after the girl's admission to the hospital.

Clinical examination on admission showed a tall slim girl in a fair state of nutrition, appearing acutely ill and complaining of pain in the left arm, left knee, and abdomen. The skin of the neck, chest, and arms showed a fading, confluent, macular rash of coppery tinge. There were petechiae over the right eyelid and an ecchymotic spot on the posterior chest wall. Heart: apex in fifth intercostal space at the midclavicular line; the sounds were of good quality; there was a blowing systolic murmur over the apex which was transmitted to axilla and base, and snapping aortic second sound.

The lumbar region and the muscles of the right arm were exquisitely tender to the touch. The liver and spleen were not enlarged.

Temperature was 104 F. pulse, 96; respirations, 28. The blood pressure was 102/65.

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The laboratory findings on admission were as follows: *Urine:* Albumin 3 plus; numerous clumps of white blood cells; red blood cells were rare; there were no casts. *Blood:* Hemoglobin, 74 percent; red blood cells, 3,910,000; white blood cells, 20,750; differential count, nonsegmented forms, 7 percent, polymorphonuclears, 79 percent, lymphocytes, 10 percent, monocytes, 4 percent. Urea nitrogen, 49.5; uric acid, 6.7. Blood culture was sterile on two examinations. The sedimentation rate was 55 mm. per hour.

Electrocardiogram showed no marked changes.

X-ray examination showed an enlarged heart of mitral type, with a suggestion of a small pericardial effusion.

In the course of the next five days the patient's condition became markedly worse. Pericarditis with effusion developed, with cyanosis, dyspnea, precordial pain, and cardiac dullness extending to the left midaxillary line and to the right of the sternum. The heart sounds became distant at apex. The liver was nearly three fingers below costal margin and was exquisitely tender. Both kidney regions were tender. The petechial rash spread and the temperature oscillated between 99 and 102 F. The patient was put into an oxygen tent. On the fifth hospital day she showed some improvement. The cardiac sounds at apex became more distinct; the cardiac dullness receded; and the macular rash and petechiae disappeared. Tenderness in the lumbar region decreased and the temperature became normal.

The blood findings at this time were: Urea nitrogen, 16.8; uric acid, 3.4. Albumin was still present in the urine.

Another x-ray of the chest, two weeks after the onset, showed an enlarged heart, pleural thickening of the transverse fissure on the right and the main fissure on the left, with no evidence of pleural effusion.

Twenty days after admission the temperature rose again to 103 F., and the first rheumatic nodules appeared on the scalp and forehead. The electrocardiogram showed inverted T waves in leads I and II, suggestive of myocardial damage.

During the following 3 months rheumatic nodules appeared in rapid succession, gradually increasing in number and reaching a peak about 10 weeks after admission. At this time there were several almond size nodules over the scalp, along the ridge of both ulnar bones, and over the left olecranon. There were many pea size nodules over the tendons of both

Fig. 1.—M. K. Rheumatic nodules on hands.

Fig. 2.—M. K. After recovery.

wrists, the phalangeal joints, and both ankles and knees. The many packed nodules over the wrists and fingers limited the action of these joints, kept the fingers semiflexed, and gave the hands the appearance of rheumatoid arthritis. (Fig. 1) The x-ray showed no bone change. The hemoglobin dropped to 62 percent, and two whole blood transfusions were given. At this time also a chest x-ray revealed the presence of a small marginal pneumothorax in the right axilla, which resolved spontaneously.

The sedimentation rate remained stationary, around 50 mm. per hour, for 15 weeks, and then dropped to 5 mm. per hour, and remained low thereafter.

Three months after admission the patient was free of symptoms of acute rheumatic fever (Fig. 2); but cardiac decompensation had developed.

On September 12, 1947, 5 months after admission, an unusual complication developed. The patient was cold, and there was marked edema and pain in the left arm. The condition was diagnosed as thrombosis of the left subclavian vein. This resolved under conservative treatment.

After a long psychological preparation the patient was transferred to a sanatorium, where she continued to shows signs of decompensation for another eight months. However, she gradually improved, was permitted out of bed, and finally was discharged in November 1948.

The girl is now being followed through the clinic at the Infirmary. Her general condition is remarkably good. The heart is not enlarged; there is a blowing apical systolic murmur transmitted to the axilla and a diastolic rumble at the apex as well as a systolic and diastolic murmur at the base. The blood pressure is 120/40. Sedimentation rate is normal. X-ray showed the heart to be somewhat globular, but not enlarged. The electrocardiogram suggested improvement.

Diagnosis: rheumatic fever, mitral stenosis and insufficiency, aortic insufficiency, regular sinus rhythm, cardiac compensation II C.

Treatment: During the acute rheumatic phase the treatment included penicillin, oxygen, salicylates, and ultraviolet blood irradiation (9 treatments).

During the decompensation stage digitalis, mercupurine, and ammonium chloride were given. The diet was salt free, with a high vitamin and a high caloric content.

The patient spent one year in a sanitorium for cardiac children. She was treated also by psychotherapy since she was at times extremely unco-operative. Her mother was encouraged and instructed by social service.

Summary

This is a case of a second attack of rheumatic fever, following acute pharyngitis, with the following symptoms: pericarditis, nephritis, purpura rheumatica, pleural thickening, joint and muscle pains, erythema multiforme, rheumatic nodules, leukocytosis of over 20,000, anemia, high sedimentation rate, cardiac decompensation. There was gradual improvement over a period of two years. The patient was left with mitral insufficiency and stenosis and aortic insufficiency, well compensated, and was capable of moderate activity. There was the possibility of further rehabilitation.

Stilbestrol in Habitual and Threatened Abortion

Clementina J. Paolone, M.D.

THE TREATMENT OF threatened abortion and habitual abortion by high doses of diethylstilbestrol was originated by Karnaky in 1942[1]. Since his first report there have been other papers corroborating both the efficacy of this method of treatment and the safety of its use in pregnancy.[2,3]

Prior to the introduction of high dosage stilbestrol therapy the treatment of habitual and threatened abortion consisted chiefly of rest in bed and sedation, then this, plus vitamin E, thyroid, and finally progesterone. The latter substance gained the most advocacy for a time but later studies, notably by Smith, Smith, and Hurwitz,[4] demonstrated that the use of progesterone alone actually suppressed the production of endogenous progesterone, as shown by diminution in urinary pregnandiol titer following such treatment. It was then found that when estrogen was given along with progesterones, the fall in pregnanediol level was prevented, and subsequent clinical trials of estrogen and progesterone resulted in a higher percentage of salvaged pregnancies than that obtained with progesterone alone. Karnaky's contribution was the discovery that estrogen alone, given in large dosage, prevented abortion in a higher percentage of cases than any other method previously used, including the estrogen-progesterone method. He found that the pregnant woman could tolerate 200 mg. of diethylstilbestrol daily with no ill effect, and gave some of his patients total dosages ranging up to more than 24,000 mg. without producing any apparent harm. In no case was abortion brought on by such high doses, which disproved the belief held by some that estrogens can bring on abortions by causing expulsive contractions of the uterus. It is estimated that the pregnant woman tolerates stilbestrol in doses 1000 times as much as a non-pregnant woman can take before experiencing untoward symptoms. The mechanism by which stilbestrol acts to prevent abortion is thought to be one of direct stimulation of the corpus luteum and trophoblast in such a manner as to cause the utilization of chorionic gonadotropin to produce more estrogen and progestin.

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I have had the opportunity in the past year and a half to observe the efficacy of large doses of stilbestrol in a number of cases of threatened and habitual abortion. These are described below individually and in some detail to illustrate the differences in dosage requirements. By and large, the doses used are in conformance with the recommendations of the original workers, but it will be seen that modifications have been made in both size and frequency according to the dictates of clinical judgment in the particular situation.

CASE REPORTS

CASE I. K. I., a 28 year old Japanese-American, had previously had three pregnancies, in 1945 and 1946, all terminating in spontaneous abortion at the ninth to eleventh week of gestation. She was under my care for the last two of these, and treatment consisted in each instance of bed rest, thyroid, vitamin E and B-complex, and progestin, to no avail. In each episode there was recovered what appeared to be a well formed fetus. This, in addition to the findings of normal sperm in the husband's seminal fluid, indicated that the reason for the repeated miscarriages did not lie in any abnormality in the conceptus, but was rather one of failure of the uterus to grow in keeping with the pregnancy. On examination the fibrotic feel of the fundus seemed to support this impression.

Following a menstrual period on March 30, 1947, the patient again became pregnant. The same treatment was instituted as before and this time no untoward symptoms appeared until about the thirteenth to fourteenth week of gestation. Then, on July 25, 1947, she began to have severe intermittent uterine contractions and some vaginal bleeding, similar to the onset of her previous miscarriages, and again it appeared as though abortion would be inevitable. At this point the first attempt at stilbestrol therapy was made. She was given 25 mg. by mouth every 15 minutes, beginning within an hour and a half of the onset of the symptoms. Almost immediate relief from the cramps was obtained but the bleeding continued, with diminishing severity, until 16 doses (a total of 400 mg.) had been taken in a period of 4 hours. Another 200 mg. was given in the following 4 hours, 25 mg. every half hour. With attempts

to reduce the dose subsequently there were recurrences of cramps and some bleeding for the ensuing week. With each of these threats the patient, following instructions, resumed taking 25 mg. every 15 to 30 minutes. The treatment was begun with the patient in the hospital, and continued at home after subsidence of the acute episode of cramps and bleeding. She was kept on a maintenance dose of stilbestrol which never went below 30 mg. daily until she entered the ninth month of gestation. In the almost 6 months time before delivery she was confined to her apartment, with room and bathroom privileges when not bleeding. Whenever bleeding or cramps recurred she immediately resumed taking frequent 25 mg. doses of stilbestrol until the symptoms subsided. Thus, from July 25, 1947, to January 5, 1948, when treatment was discontinued, this patient took a total of approximately 7000 mg. There were at no time any untoward symptoms or side-effects attributable to the drug. On January 23, 1948, she had a spontaneous delivery of a normal female infant weighing 7 lbs, 10 oz.

Interestingly enough, this patient again became pregnant before her baby was 3 months old, and this time had a completely uneventful course, terminating in the birth of a normal male infant on December 19, 1948. At no time during this last pregnancy were there any cramps or bleeding and no stilbestrol was given.

CASE II. G.H., a 29 year old white housewife, first seen July 11, 1947, with signs of early pregnancy, her last menses having occurred June 4, 1947, gave a history of three previous pregnancies, in 1943, 1944, and 1946, all of which had terminated in spontaneous abortion, at 8 to 10 weeks gestation. Because of this history she was immediately started on 5 mg. of stilbestrol three times daily as a prophylactic measure. Six weeks later the dose was doubled, to 30 mg. daily. She continued this dose for the following 3 weeks. On September 15, 1947, she had intermittent cramps and bleeding and the dose was immediately increased to 25 mg. every 15 minutes for 4 doses, followed by 4 more doses at half-hour intervals. This proved sufficient to stop both bleeding and cramps. Thereafter she took 40 mg. a day (10 mg. every 3 hours), with an order to take 25 mg. immediately upon signs of recurrence of these symptoms. This happened on two occasions, October 12 and December 7; in each case the symptoms were quickly brought under control with the increased dose. The 40 mg. a day regimen was continued to January 15, 1948. The dose was then gradually reduced to 5 mg. three times a day until February 15, when the medication was discontinued. She went into labor March 2, and was delivered normally of a healthy male infant weighing 8 lbs., 8 oz.

CASE III. M.Z., a 31 year old white woman, gave a history of one previous pregnancy which had ended in spontaneous abortion at 8 weeks gestation in June 1947. When first seen, October 10, 1947, she was about 4 or 5 weeks pregnant. She was started on stilbestrol, 5 mg. every evening, as a preventive measure. Her pregnancy progressed normally until December 7 (about 12 weeks of gestation) when she had intermittent cramps and vaginal bleeding. She was given 25 mg. of stilbestrol every half hour for 4 doses, followed by 15 mg .every 2 hours for 4 doses, which was sufficient to control the symptoms. Thereafter she was maintained at 10 mg. three times a day to four and a half months of gestation, after which she continued with 5 mg. three times a day until the ninth month. She was delivered of a normal male infant weighing 7 lbs. 10 oz., on June 9, 1948.

CASE IV. R.S., a 35 year old white woman, gravida II, was first seen October 15, 1947, complaining of cramps and slight staining. She had had her last previous menses September 6, 1947. Her first pregnancy, a year before, had miscarried at 14 weeks gestation. On the presumption that she might be threatening to abort a very early pregnancy she was immediately given 25 mg. of stilbestrol every 15 minutes for 4 doses, then every half hour for 4 more doses, which stopped the cramps and staining. She was thereafter maintained on 30 mg. daily to four and a half months, at which time the dose was reduced to 15 mg. a day to the ninth month. On two occasions, in the sixth month and again at the end of the seventh month, it was necessary to give her large doses (the same as when first seen) to control moderately severe attacks of cramps and bleeding. The patient was delivered of a normal male infant, weighing 7 lbs. 8 oz., on June 4, 1948. In this case the impression was that the tendency to abort was due to hyperirritability of the uterus caused by posterior position and partial fibrosis.

CASE V. M.M., a 21 year old primigravida, last menses February 20, 1948, began on May 4 (at 8 or 9 weeks of gestation) to have severe backaches, lower abdominal cramps, and vaginal bleeding. Four doses of stilbestrol, 25 mg. every 15 minutes, stopped the bleeding, and 4 more like doses at 2-hour intervals almost entirely controlled the cramps. She was kept on 15 mg. every 2 hours for another 12 hours because of continued backaches, then put on a maintenance dose of 10 mg. three times a day. This was continued to the fifth month, at which time the dose was reduced to 5 mg. three times a day. There was no recurrence of symptoms and the medication was discontinued when she entered the ninth month. She had an uncomplicated delivery on November 23, 1948, with the birth of a normal female infant weighing 7 lbs., 5 oz.

CASE VI. M.F., a 24 year old white woman, para I, gravida II, was first seen January 10, 1948, at which time she was in about the eleventh week of pregnancy. She stated that she had been having cramps intermittently since November 15, 1947, and had been given corpus luteum by another physician. When first seen she was having more severe and more regular cramps and some vaginal staining. With the administration of 25 mg. of stilbestrol every 15 minutes for 4 doses and then hourly for 4 more doses all bleeding and cramps subsided completely. Following this, 5 mg. three times a day to the fifth month, then 5 mg. once daily to the beginning of the ninth month sufficed to prevent any recurrence of threatening symptoms. The patient was delivered without complication of a normal male infant on July 5, 1948.

CASE VII. J.V., a 37 year old white female, had been infertile for a period of 7 years. The chief causative factor in her infertility appeared to be a small fibrotic uterus which was retrodisplaced. In January 1948, her menses were delayed, and upon examination there were signs of a possible early pregnancy. On February 18, at about 6 weeks, she began to have serious signs of impending abortion, severe cramps and bleeding. Four doses of 25 mg. of stilbestrol every 15 minutes controlled the cramps and 6 more at half-hour intervals stopped the bleeding. She was kept on 25 mg. every 2 hours for 4 more doses, then on 15 mg. every 3 hours for several days. The dose was then reduced to 10 mg. three times a day, with advice to increase immediately upon

recurrence of any cramps and bleeding. The pregnancy continued uneventfully except for some spotting on two occasions, in the fourth month and again in the sixth, which was quickly controlled with 4 half-hourly doses of 25 mg. The maintenance dosage of 30 mg. daily was continued up to the ninth month. This patient was delivered elsewhere, and reported later that she had a normal female baby weighing 6 lbs., 12 oz., following a rather difficult forceps delivery.

CASE VIII. F.Y., a 31 year old Chinese woman, had been, like the previous patient, infertile for a period of about 3 years. In her case, also, the difficulty was a small, fibrotic posterior uterus. In 1942 she had a thyroidectomy for toxic goiter, otherwise her past history was negative. In the treatment of her sterility she was given stilbestrol in small doses (0.5 to 1 mg. daily). In January-February 1948, she missed a menstrual period and upon examination a diagnosis of early pregnancy was made. She was at that time taking 1 mg. of stilbestrol daily and was instructed to continue. On February 20, 1948, she had some lower abdominal cramps and slight vaginal staining. She was immediately given 25 mg. of stilbestrol every 15 minutes for 4 doses, followed by 4 more at half hour intervals, which brought the symptoms under control. She continued with a maintenance dosage of 5 mg. three times a day until the ninth month. There was no recurrence of symptoms at any time again throughout the pregnancy. She was delivered of a normal male infant which weighed 7 lbs., 2 oz., on September 19, 1948.

The eight patients here described exemplify situations in which, judging from the past experiences with similar cases, abortion would have occured inevitably if stilbestrol had not been used. The first two cases are particularly instructive because of the many previous repeated abortions, all of which had failed to respond to other accepted methods of therapy.

I do not mean to imply that stilbestrol therapy is a panacea which will prevent miscarriage in all cases. In five cases, which will not be described in detail, this method failed, although used early enough and with proper co-operation by the patients. In not one of these, however, was a recognizable fetus recovered; if something resembling an embryo was found it was not normally formed. In other words, these were cases of blighted ova or otherwise abnormal conceptions. In one of these cases repeated episodes of bleeding and other signs of impending abortion were controlled by stilbestrol each time until the sixth month. However, after the fourth month it became apparent that the pregnancy was not proggressing normally, and at the end of five and one-half months of gestation the patient finally expelled a mass the size of an apple, containing what had the appearance of a fetus undergoing dissolution. A small fibrotic placenta was also expelled. This was a true missed abortion.

One failure with this method of treatment occurred in a patient who was unco-operative and who eventually lost her pregnancy at five and a half to six months gestation. She expelled a well-formed but non-viable male fetus, subsequent examination of which revealed no abnormalities. The placenta showed an area of old hemorrhage. This patient had failed to report her cramps and bleeding promptly and then did not carry out instructions as to dosage too carefully. We were convinced that the loss of this particular pregnancy was not attributable to failure of the method, but rather to negligence in its execution.

In conclusion, I feel that this method of high dosage stilbestrol therapy as outlined by Karnaky has shown definite value in the management of habitual abortion, threatened abortion, and premature labor. In none of the cases in which I have used large doses have any noticeable toxic effects been produced by the drug.

Summary

Eight cases are described in which stilbestrol therapy succeeded in salvaging pregnancy where all indications were that abortion would inevitably have occurred. In four of these cases previous pregnancies had been lost with other methods of treatment.

The history and physiological rationale of the method are discussed.

The limitations of this method are mentioned and examples of failure cited.

The lack of toxicity of large doses of stilbestrol in the pregnant state is demonstrated in these cases.

References

[1]Karnaky, K. J., Use of stilbestrol for treatment of threatened and habitual abortion and premature labor; preliminary report, South. M. J. 35: 838-847, Sept. '42.

[2]Karnaky, K.J., Estrogenic tolerance in pregnant women, Am. J. Obst. & Gynec. 53: 312-316, Feb. '47.

[3]Rosenblum, G., and Melinkoff, E., Preservation of threatened pregnancy with particular reference to use of diethylstilbestrol, West. J. Surg. 55: 597-603, Nov. '47.

[4]Smith, O. W., Smith, G. V., and Hurwitz, D., Increased excretion of pregnanediol in pregnancy from diethylstilbestrol with special reference to prevention of late pregnancy accidents, Am. J. Obst. & Gynec. 51: 411-415, March '46.

Treatment of the Acute Infections of the Nervous System

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THE INTRODUCTION OF CHEMOTHERAPY has revoluntionized the treatment and prognosis of infections of the nervous system during the past ten years; and the isolation and identification of various neurotrophic viruses have added materially to the possibilities of diagnosis.

Infections of the nervous system may be selective in the anatomical structures which they attack. The leptomeninges alone may be involved in meningitis, the cortex, the tracts and nuclei of the deep structures of the brain in encephalitis, the spinal cord in myelitis, the spinal roots in radiculitis, and the peripheral nerves in neuritis. The anatomical involvement may be more diffuse, producing such combinations as meningo-encephalitis, encephalomyelitis, myeloradiculitis, or encephalomyeloradiculitis. The infectious agent may be bacterial, parasitic, or virus. The infection may occur primarily in the nervous system, with or without general systemic involvement, or it may be secondary to an infectious process, having its primary focus elsewhere in the body. Elevation of temperature and leucocytosis are not invariable accompanying findings. Mental changes and psychoses may be an integral part of the clinical symptomatology.

Meningitis

Meningitis is an acute febrile disease, resulting from a bacterial or parasitic invasion of the cerebrospinal fluid and leptomeninges. Its onset may be preceded by prodromal symptoms of vague malaise, generalized aches and pains, and evidence of infections of the upper respiratory tract. It is characterized by severe headache, fever, with chills, stiff neck, rigidity, pain in the extremities, and evidences of general systemic illness. Leucocytosis, increased sedimentation rate, and occasional septicemia are present.

The most frequent but least serious offender is the meningococcus. The organism appears in the purulent exudate in the subarachnoid space, in the nasopharynx, and in the blood stream. It is found in the nasopharynx of carriers and convalescents, long after recovery from the acute illness, and is probably spread by droplet infection. Meningococcus meningitis occurs in epidemics, chiefly during the winter months. Children are especially susceptible; 50 percent of the children being under five years of age, and 50 percent of all cases being under fifteen years of age.

There was no specific treatment for meningococcus or "epidemic" meningitis previous to the introduction and use of anti-meningococcus serum, during and after World War I. The mortality from meningitis was from 50 to 80 percent. The use of the specific serum intrathecally, followed by frequent spinal drainage, reduced the mortality to less than 20 percent. Following the introduction of chemotherapy, first in association with the anti-meningococcus serum, and later alone, the mortality has been so dramatically reduced that only those patients with the fulminating type or those who develop systemic complications present any great problem. Complete recovery is now almost the rule, whereas thirty years ago this was a serious and dread disease.

One diagnostic lumbar puncture, followed by remedial administration of sufficient sulfonamides orally, will usually effect a cure in a remarkably short period. The preferable route of administration is oral. If the patient cannot swallow, a stomach tube can be used for both fluids and drugs. Intravenous or subcutaneous administration can be used when indicated. Intrathecal

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injections are seldom necessary but are relatively safe.

The sequelae of complications involving the nervous system, such as obstructive hydrocephalus, arachnoiditis, mental defect, and cranial nerve involvement, resulting in loss or impairment of vision and hearing, and strabismus, which were common before the use of sulfonamides, have become relatively rare.

The meningitides due to other more virulent organisms, such as staphylococcus, streptococcus, pneumococcus, influenza bacillus, and the tubercle bacillus have also proved amenable to chemotherapy and antibiotics although not so completely as has the meningococcus. Sulfonamides, penicillin, and most recently, streptomycin, have reduced the high mortality of these infections which had previously been between 90 percent and 100 percent. Ford* stated in 1937, that "recovery from pneumococcus meningitis is exceptional and rarely occurs, and then only with serious involvement of the nervous system as sequelae, and that once the diagnosis of tuberculous meningitis is established, a fatal outcome is almost inevitable."

In contrast with this former discouraging outlook, the more recent reports from various clinics are relatively optimistic. Pneumococcus meningitis, for instance, which is usually secondary to one or more primary foci elsewhere in the body (otitis media, mastoiditis, pneumonia, or compound fractures of the skull involving the paranasal sinuses) which cannot be completely eradicated, has been unusually resistant to therapy. It is also frequently associated with a bacteremia, which tends to lower the chance of recovery one-half.

In 1944, in a study of experimental pneumococcus meningitis in animals sulfadiazine was found in the cerebrospinal fluid in greater concentration after adequate administration than was sulfathiazole, then in use. Also, when in high concentration in the spinal fluid, sulfadiazine was found to be a highly efficient agent in the treatment of both pneumococcus and staphylococcus meningitis.

The use of heparin has been advocated in an attempt to prevent the formation of thick exudates which are characteristic of pneumococcus meningitis and result in arachnoiditis.

In July, 1945, Applebaum of the New York State Health Department reported five recoveries among thirteen patients with pneumococcus meningitis, using sulfadiazine alone, and twenty-six recoveries among sixty-seven patients treated first unsuccessfully with sulfonamides, later with penicillin, administered both intramuscularly and intrathecally. This lowered the mortality to 61 percent.

In the same year, a report from George Washington University contrasted the use of sulfonamides alone among a group of forty patients, thirty-seven of whom died, with a group of sixteen, treated with a combination of sulfonamides and penicillin, among whom only nine died, bringing the mortality down to 53 percent. Four of the patients in the latter group developed neurological symptoms but all recovered. In these cases penicillin was given both parenterally and intrathecally and treatments lasted from 12 to 108 days.

In 1946, among a group of patients with pneumococcus meningitis in Minneapolis, treated with combined therapy, sulfadiazine and penicillin, the mortality was as low as 23 per cent. Among the recovered patients, six were under the age of one year, and two were over the age of fifty.

Among nineteen patients at the Children's Hospital in Washington, in which combined therapy was used as soon as the diagnosis was established, the mortality was only 16 percent.

Tuberculous meningitis differs clinically from the other types in that the prodromal illness is indefinite and may last from one week to as long as six months before becoming acute. The neurological signs which develop either gradually or abruptly are: convulsions, focal signs (paralysis and paresis), increased intracranial pressure, hydrocephalus, and mental changes. Since the infection is maximum at the base of the skull and spreads up along the Sylvian fissures, stiff neck and Kernig's sign may be late in developing.

Previous to the use of streptomycin, once the diagnosis of tuberculous meningitis was established a fatal outcome was almost inevitable. With streptomycin, though complete recovery is still rare, success has been reported in individual cases. Applebaum and Haltein reported in September 1947, the recovery of a nine-year-old boy, and Metax and Fraser, in Michigan, reported the recovery of a thirty-one-year-old woman, both treated with streptomycin, intrathecally and intramuscularly. The second patient received 282 gm. over a period of 175 days. The first patient, the

*Ford, Frank, Diseases of the Nervous System in Children, 1937.

nine-year-old boy, was treated for twenty-six days, and recovery in six months was complete. The dosage used was 2,000,000 units daily, intrathecally and intramuscularly every three hours.

Since 1937 all cases of Type B. Haemophilus influenzal meningitis at the Babies Hospital in New York have been treated with type-specific rabbit serum, plus sulfadiazine, with 78 percent recovery. Sulfadiazine was given subcutaneously 0.1 gm. per kilogram of body weight, repeated twice at twelve hour intervals and followed by oral doses as needed.

Torula meningitis (from Torula histolytica which exists widely in nature but invades humans rarely) has been considered ultimately fatal. In 1945, one case of recovery, without follow-up, was reported with the use of sulfadiazine.

Lymphocytic choriomeningitis or aseptic meningitis is a benign form of meningitis that may occur in small outbreaks or epidemics. Its course is short and recovery is usually complete within a few weeks, without specific therapy. The cause of this disease is believed to be a virus which has recently been isolated by various workers and transmitted to experimental animals. The virus enters the body, probably by droplet inhalation, or through the skin or the conjunctiva, and finally reaches the blood stream, later to invade the central nervous system. The isolation of this virus is important, because of the similarity and possible relationship to the viruses of various forms of encephalitis, as well as for determining the epidemiological source of the disease, believed to be transmitted through rodents, mosquitoes, bed bugs, lice, and ticks.

Encephalitis

"Encephalitis" and "encephalomyelitis" designate true infectious inflammation of the brain and spinal cord, in contrast to "encephalopathy," or disease due to exogenous and endogenous toxins and physical agents, such as lead, alcohol, and carbon monoxide; toxemias; vaccines and toxoids; cranocerebral trauma; and arteriosclerosis. Encephalitis may be of bacterial origin, as in scarlet fever and enteric fever and the localized infections of the brain due to overwhelming bacterial meningitis and brain abscess. More often encephalitis is due to a virus and occurs either as a complication of such diseases as mumps, measles, influenza, herpes zoster, and infectious hepatitis, or as a specific virus disease.

Some of the viruses which have a predilection for the nervous system are those of lymphocytic choriomeningitis, Japanese B, St. Louis, and Western and Eastern equine encephalitis, the virus of poliomyelitis, and the still un-isolated virus believed to be the cause of epidemic encephalitis lethargica, or "sleeping sickness."

Encephalitis lethargica, or epidemic encephalitis, is characterized by somnolence, pyrexia, and other signs, such as oculomotor palsies, cerebral irritation, and menigeal irritation. This type occurred during the epidemics from 1918 to the mid-twenties. Later cases showed somewhat different clinical characteristics, i.e., choreiform movement, athetosis, oculogyric crises, as well as cranial nerve palsies. The acute illness and the onset were comparatively mild. The causative virus has not been isolated, nor has the mode of infection been definitely determined. In the past few years a theory has been advanced, but not yet proven, that the virus of "herpes febrilis" may be the same as the virus which causes encephalitis lethargica.

During an epidemic of "Influenza B" in London in 1946, there were reported cases of involvement of the nervous system characterized by headaches, lassitude, stiff neck, ptosis, photophobia, drowsiness, external ocular weakness, areflexia, muscular weakness, and partial transverse myelitis. Patients with brain stem localization resembled the cases of classical encephalitis lethargica. Neurological complications, mental confusion, irrationality, flaccid paraparesis, areflexia, and increased cells and protein in spinal fluid have also been reported following atypical or virus pneumonia.

In recent years, measles encephalitis has seemed to occur in epidemic proportions. In the first half of 1946 there were twenty cases at the Cook County Hospital in Chicago and ten in nearby hospitals. Among those at Cook County Hospital, a greater percentage occurred among negroes. The mildness or severity of the measles seemed not to be a factor in the production of encephalitis, which developed usually on an average of three to four days after the appearance of the rash. The onset was abrupt, with convulsions and a change in the child's condition from normal to a lethargic state or to one of extreme irritability. The spinal fluid findings varied; they were either normal or showed increased protein, sugar, and cell count. The treatment was supportive, supplemented with the use of gamma globulin and measles convalescent serum. Recovery was unpredictable and the mortality was 15 percent, sixteen patients recovered completely, one had residual spasticity and incoordination.

Encephalitic manifestations have been reported in the icteric and pre-icteric stage of infectious hepatitis, especially in epidemics among the armed forces. The early symptoms simulated poliomyelitis, meningitis, or encephalitis. The spinal fluid cell count was usually elevated. It is believed that some strains of the "hepatic" virus are neurotrophic or may liberate another virus, latent in the nervous system, which is responsible for the production of the encephalitic symptoms.

Guillain-Barré syndrome, or encephalomyeloradiculoneuronitis, is also considered due to a virus infection. The pathological lesions suggest a hematogenous spread with a predilection for certain cranial nerve nuclei. The lesions are characterized by demyelinization and axis cylinder destruction. The clinical types are the myelitic, the abortive or mononeuritic, the polyneuritic, the bulbar, and the cerebral. The onset of the disease is usually sudden; it may be preceded by a mild upper respiratory tract infection. The diagnosis is usually made on the clinical findings and the cytoalbuminuric dissociation (increased protein and absence of cells) found in the spinal fluid. The disease is self-limited, usually afebrile, with complete or almost complete recovery being the rule. A mortality of 10 percent has been reported among epidemics occurring in the Army of the United States.

Both encephalitis and encephalomyeloradiculitis (Guillain-Barré) have followed shortly upon infectious jaundice or hepatitis, which disease, though sporadic in appearance, occurred in small epidemics among the Armed Services in both the Pacific and Mediterranean theatres of war. There is no specific treatment for Guillain-Barré syndrome, though high Vitamin B and C intake is advocated, the value of thiamin chloride being protective, rather than therapeutic. Treatment is supportive; bed rest and hospitalization in the acute state are advisable. Heat relieves radicular pain. Tidal drainage may be necessary if bladder function is involved. Multiple small transfusions may help. Adequate nourishment is essential and controlled physiotherapy when recovery begins is beneficial.

Myelitis. Pyogenic Infections of the Spinal Cord

The term "transverse myelitis," although used loosely to designate any condition in which the spinal cord functions are lost because of localized disease, is more properly indicative of an infectious lesion.

The pathogens most frequently found are the staphylococci and the streptococci. These are usually blood borne, although the infection may spread through the epidural veins and the veins of the nerve roots from contiguous foci of infection.

The leptomeninges are edematous, translucent, and adherent to the dura, nerve roots, and spinal cord. The cord itself appears swollen, soft, and hyperemic. Areas of necrosis are seen and, becoming confluent, form abscess cavitation. Microscopically, micro-organisms, perivascular infiltration, and glial hyperplasia can be found.

Such a myelitis usually occurs in the course of pyogenic diseases in other organs of the body. Local pain in the back, usually severe, is followed by the very rapid development of motor and sensory paralysis. Early fluctuating neurological signs give place quickly to complete flaccid paraplegia with urinary retention. In such a case, flaccid paralysis represents "spinal shock" rather than lower motor neurone involvement. Spinal fluid reveals pleocytosis, with both lymphocytes and polymorphonuclear leucocytes. Spinal fluid protein is moderately increased and the spinal fluid dynamics, by manometric test, may reveal either a block, a partial block, or normal patency of the subarachnoid space.

The relative localization of the process differentiates it from poliomyelitis and meningitis. The differentiation from acute epidural abscess is difficult. The chief factor in diagnosis is the more fulminating course of the myelitis.

Conservative treatment and chemotherapy are the only course advocated. Surgical drainage is rarely advisable. The mortality has been high, the prognosis for improvement poor, though with antibiotic therapy a somewhat better outlook can be postulated.

Poliomyelitis

In the past five years significant contributions to the knowledge and management of poliomyelitis have been made through the concepts of the Kenney treatment and experimental work on the route of transmission of the virus to the nervous system.

In 1943, Rosenow at Mayo Clinic introduced as a diagnostic test for poliomyelitis, an intradermal injection of 0.03 cc of 10 percent solution euglobulin fraction of the serum of horses immunized to the streptococcus which he found in the presence of poliomyelitis. Positive tests were of greatest occurrence and value in early stages of acute and abortive poliomyelitis and were more frequent in the bulbar than in the spinal form of the

disease. The test was also to be used as a control for the amount and number of the therapeutic injections of poliomyelitis anti-streptococcus serum, Rosenow's theory being that the streptococcus is not a passive invader but a part of the infectious process now generally attributed to virus. This concept has not won universal acceptance.

In recent epidemiological and etiological studies of poliomyelitis, the increased number of non-paralytic cases diagnosed is probably due to the greater frequency of diagnostic lumbar punctures. The portals of entry of the virus include the nerve fibers of body surfaces (to regional ganglia); the nose, through the olfactory nerve; the alimentary and respiratory tracts, through the gustatory pathways, by way of the visceral afferent system and sympathetics and the trigeminal nerve endings. The pharynx and dental caries are especially favorable portals of entry.

The bulbar type of poliomyelitis seems to have a higher incidence than the 6 percent which has been the accepted figure hitherto. In figures of the 1946 epidemics, the incidence was 23 percent for children under the age of 16 years. In bulbar poliomyelitis the encephalic picture which is a prominent feature can often be relieved by oxygenation, hence these cerebral symptoms may be due to deficiency of oxygen rather than to the direct effect of the virus. In the treatment of the bulbo-cervicothoracic type the use of a respirator is required. Serious bulbar poliomyelitis may occur without cranial nerve involvement. Therapeutic measures are based on the physiological findings. In adults, bladder paralysis occurs with a 10 to 20 percent frequency, and may require tidal drainage, but complete recovery of function is to be expected.

Electromyographic studies have demonstrated three different types of abnormal muscle irritability. In the acute stage, the electrical response is that of protective reflex spasm, generally noted in any response to pain. In relaxed, non-painful muscles a pattern is found like those in partially paralyzed muscles during either regeneration or degeneration. The third type is that of reflex hyperirritability and resembles that seen in spasticity due to lesions in the upper motor neurone.

Pathological studies of acute fatal cases of poliomyelitis have demonstrated complete denervation of the muscle fibers at the myoneural junctions; abnormal expansion of muscle end-plates and proliferation of lipoblasts within poliomyelitic muscles.

Prostigmin was advocated in the treatment of poliomyelitis as an adjunct to the Kenney method. Its chief significant effectiveness lies in the relaxation of muscle spasm, thus relieving pain secondarily, as well as in decreasing incoordination, and increasing active muscle contraction. As it was used in the treatment of poliomyelitis it was felt there was some indication that the spinal cord is possibly more sensitive to the action of prostigmin than the myoneural junctions. Although the mode of its action is complex, it is probably at the synaptic connections of the anterior horn cells with the internuncial neurones, lesions of which may be the cause of the hypertonus or stretch reflex. The beneficial effect of the prostigmin would therefore occur at the site of the abnormal function in the cord. However, later studies have tended to disprove the effectiveness of prostigmin and its value is still debatable.

Curare has not been sufficiently effective in producing muscle relaxation to warrant its general use and seems to be definitely contraindicated in the bulbar type of poliomyelitis.

The Kenney concept of infantile paralysis emphasizes the importance of treating, early in the acute stage of the disease, the symptoms of (1) muscle spasm, (2) incoordination, and (3) "mental alienation", a term coined to explain the inability of a patient to move purposely and actively a muscle that is not paralysed. It is known that tonic muscle spasm, or muscle fiber contractions, hyperirritability of muscles to stretching, occasional fibrillary twitchings, and a tendency of the muscle to shorten itself and its inability to relax or lengthen, may be widespread throughout the body. This occurs especially in the muscles of the back and neck and is not limited to the permanently affected muscles. It is important that such fully recoverable muscles be kept in a position of physiological rest. If tonic muscle spasm and pain can be relieved by hot fomentations and massage, re-education can be started earlier. Early weakness and apparent paralysis due to these factors can be treated, otherwise the end results of such untreated muscle spasm are shortening and deformities which can be prevented if spasm is overcome. Patients under the Kenney type of treatment are more comfortable, and alert; and those with residual paralysis are better able to accept rehabilitation measures and surgical treatment when this is necessary. The percentage of recoveries and the end results in acute cases of poliomyelitis certainly justify its use, though neither the Kenney treatment nor the use of prostigmin, nor both, can prevent paralyses, caused by a destructive irreversible lesion.

RESIDENT'S ROUND TABLE

A Survey of Cesarean Sections Performed at the New York Infirmary 1940-1948

E. Catherine Cline, M.D., and Elizabeth L. Coultas, M.D.

THE PURPOSE OF this paper is to review the cesarean sections performed at the New York Infirmary from 1940 to 1948 inclusive. During this nine-year period, there was a total of 8,471 deliveries. Of these, 1654, or 19.5 percent were operative (this includes all forceps deliveries plus 391 cesarean sections). The incidence of cesarean sections at the Infirmary has gradually increased from 3.04 percent of total deliveries in 1940, to 5.18 percent of total deliveries in 1948. In a survey of cesarean sections performed at the Infirmary from 1935 to 1939, Jennings gave the incidence as 2.49 percent for the five year period.* From 1940 to 1948 a total of 391 sections were done, an incidence of 4.61 percent for the nine years. Approximately two-thirds of these were done by the low flap technique. (Chart 1.)

In the nine year series, there were six maternal deaths, or 1.53 percent of those delivered by cesarean section. In three of the fatal cases, section was done primarily for severe toxemia; one was done for placenta previa, one was a repeat section in labor with ruptured membranes; and one was for cephalopelvic disproportion after eleven hours of trial labor with ruptured membranes. Four were complicated by rheumatic heart disease.

Dr. Cline is Resident and Dr. Coultas is Assistant Resident in Obstetrics, New York Infirmary.

CASE I. (T.V.) 1940: 28 year old nullipara with rheumatic heart disease and severe toxemia who was delivered by low classical cesarean section at 24 weeks gestation. She decompensated on the second postoperative day, developed nephritis, and died.

CASE II. (A.P.) 1942: 37 year old para III with rheumatic heart disease, who was delivered by low classical section for severe nephritic toxemia at 32 weeks gestation. She developed peritonitis, was reopened and drained. She died in uremia and pulmonary edema on the 36th postoperative day.

CASE III. (R.B.) 1942: 36 year old nullipara, at term, who was given a trial of labor for eleven hours with membranes ruptured. A low flap cesarean section was done for cephalopelvic disproportion. She received sulfathiozole, but developed bilateral pneumonia and died on the 19th postoperative day from pulmonary embolism.

CASE IV. (L.S.) 1944: 31 year old para III with rheumatic heart disease, admitted bleeding from placenta previa, for which a low flap cesarean section was done. She died on the day of operation from acute dilatation of the heart immediately following a blood transfusion.

CASE V. (A.Z.) 1946: 39 year old para I, with rheumatic heart disease, who had had a previous cesarean section for cephalopelvic disproportion, admitted in labor with ruptured membranes. An emergency low flap section was done. She developed peritonitis and paralytic ileus. In spite of combined sulfadiazine and penicillin, she died on the fifth postoperative day.

CASE VI (E.C.) 1948: 26 year old nullipara, who at 35 weeks gestation was admitted for pre-eclampsia which failed to respond to treatment and became fulminating. She was delivered by low-flap section, developed postpartum eclampsia, and died from a cerebral hemorrhage on the 2nd postoperative day.

*Jennings, Mary A. Survey of cesarean sections performed at the New York Infirmary from 1935 to 1939, M. Woman's J. 48, 63-73, March, '41.

TABLE I

Incidence of Cesarean Sections According to Type and to Maternal and Fetal Mortality

YEAR	Total Deliveries	Operative Deliveries		CESAREAN SECTIONS												MORTALITY			
						TYPE										Maternal		Fetal (uncorrected)	
						High Classical		Low Classical		Low Flap		Extraperiton.		Porro					
		*No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	8,471	1,654	19.5	391	4.61	28	7.1	93	23.8	266	68.1	3	0.8	1	0.25	6	1.5	32	8.2
1940	821	122	14.8	25	3.04	0	....	2	8.0	22	88.0	1	4.0	0	....	1	4.0	3	12.0
1941	954	150	15.7	40	4.19	4	10.0	10	25.0	26	65.0	0	....	0	....	0	....	2	5.0
1942	964	225	23.3	56	5.80	11	19.6	11	19.6	33	59.0	1	1.8	0	....	2	3.6	4	7.14
1943	1,012	224	22.1	52	5.13	4	7.7	11	21.2	36	69.2	1	1.9	0	....	0	....	7	13.4
1944	816	149	18.2	35	4.28	5	14.3	9	25.7	21	60.0	0	....	0	....	1	2.9	4	11.4
1945	750	136	18.1	28	3.73	0	....	6	21.4	21	75.0	0	....	1	3.6	0	....	1	3.6
1946	992	213	21.5	48	4.82	1	2.0	19	39.6	28	58.4	0	....	0	....	1	2.0	7	14.5
1947	1,005	225	22.3	47	4.67	2	4.2	13	27.7	32	68.1	0	....	0	....	0	....	5	10.6
1948	1,157	210	18.1	60	5.18	1	1.6	12	20.0	47	78.4	0	....	0	....	1	1.6	0	....

There were 32 fetal deaths among those delivered by cesarean section from 1940 to 1948. Nine were stillborn and 23 were neonatal deaths, an incidence of 8.2 percent. Of these, 75 percent were premature (under 36 weeks). Eight of the fetal deaths occurred in sections for placenta previa, eight in abruptio placentae; six were delivered for severe toxemia or eclampsia; and two had erythroblastosis. One each followed cesarean section for diabetes mellitus, heart disease, and a degenerating fibroid. Two of the term infant deaths were intrapartum, both mothers having had a trial labor for cephalopelvic disproportion. One of these babies had a cord around the neck, and in the other, the cause of death was unknown. A total of 54 women had a trial labor prior to delivery by cesarean section. A comparison of these figures with the incidence of fetal mortality following other types of delivery would be necessary to draw any conclusions.

The indications for delivery by cesarean section

TABLE II

Incidence of Emergency Cesarean Sections with Fetal and Maternal Indications

YEAR	CESAREAN SECTIONS	EMERGENCY CESAREANS		FETAL INDICATIONS		MATERNAL INDICATIONS				
		No.	% of Total	Fetal Distress	Others	CPD & Trial Labor	Placenta Previa	Abruptio Placenta	Toxemia	Others
1940	25	9	36.0%	.....	.....	5	3	.....	.....	1
1941	40	11	27.5%	1	1	4	1	1	.....	3
1942	56	26	47.3%	5	2	11	3	3	2	.....
1943	52	15	28.8%	2	.....	7	2	3	.....	1
1944	35	13	37.2%	1	.....	.....	6	3	.....	3
1945	28	10	35.7%	1	.....	3	4	2	.....	.....
1946	48	26	54.0%	1	.....	10	3	7	3	2
1947	47	22	46.8%	.....	2	7	8	5	.....	.....
1948	60	31	51.6%	4	1	14	1	3	5	3
Total Study	391	163	42.0%	15	6	61	31	27	10	13

TABLE III
Incidence of Elective Cesarean Sections with Primary Fetal and Maternal Indications

YEAR	CESAREAN SECTIONS	ELECTIVE SECTIONS		FETAL INDICATIONS		MATERNAL INDICATIONS				
		No.	% of Total	Age	Others	Repeat	C.P.D.	Recent Operation	Medical	Others
1940	25	16	64.0%	.....	1	4	8	.....	1	2
1941	40	29	72.5%	3	.....	7	15	2	1	1
1942	56	29	52.7%	3	1	13	10	.....	1	1
1943	52	37	71.2%	5	1	10	17	2	2	.....
1944	35	22	62.8%	.....	.....	12	7	.....	3	.....
1945	28	18	64.3%	1	1	5	10	.....	.....	1
1946	48	22	46.0%	.....	3	9	8	1	1	.....
1947	47	25	53.2%	1	.....	5	15	.....	3	1
1948	60	29	48.4%	1	1	12	13	1	1	.....
Total Study	391	227	58.0%	14	8	77	103	6	13	6

were 42 percent emergency and 58 percent elective. The emergency sections included those done for fetal distress and malpresentation, cephalopelvic disproportion after a trial of 6 hours of good labor with or without ruptured membranes, repeat sections in labor, placenta previa, abruptio placenta, and severe toxemia. (See Chart 2). The percentage of cases with cephalopelvic disproportion given a trial of labor has increased only slightly in spite of the widespread use of chemotherapy.

The fetal and maternal indications for the elective sections which were done during the nine year period are listed on Chart 3.

There have been two marked changes in treatment during the past nine years at the New York Infirmary: first, the marked increase in the use of chemotherapy, and, second, early ambulation with a decrease in the total number of hospital days. The percentage of section cases receiving chemotherapy has progressed steeply upward, as shown on Chart 4. However, it was not until 1947 that a corresponding drop in percentage of postoperative morbidity occurred. (See Graph I.) Accompanying this decrease in morbidity was the use of pencillin in 75 percent of the total yearly sections, usually prophylactically, and a noticeable

TABLE IV
Relationship of Chemotherapy to Decreasing Morbidity After Cesarean Section

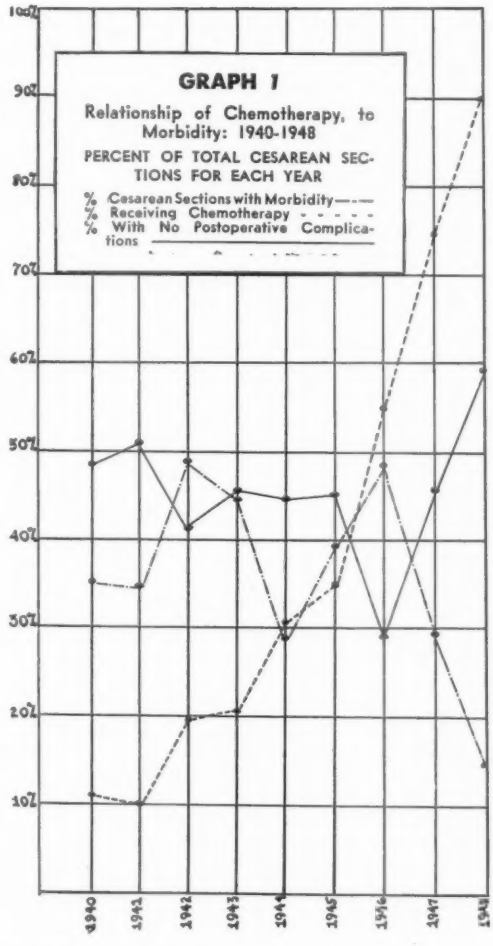
YEAR	1940	1941	1942	1943	1944	1945	1946	1947	1948
Total No. Cases of C. S. Receiving Chemotherapy	3	4	11	11	11	10	26	35	54
% Cesarean Sections Receiving Chemotherapy	12%	10%	19.4%	21.1%	31.4%	35.7%	54.1%	74.4%	90%
Total No. C. S. c Morbidity	9	14	27	23	10	11	23	13	9
% C. S. c Morbidity	36%	35%	48.1%	44.2%	28.5%	39.2%	47.9%	27.6%	15%
% Morbid C. S. Who Received no Chemotherapy	77.8%	71.5%	66.6%	60.9%	30%	36.4%	39.2%	0	0

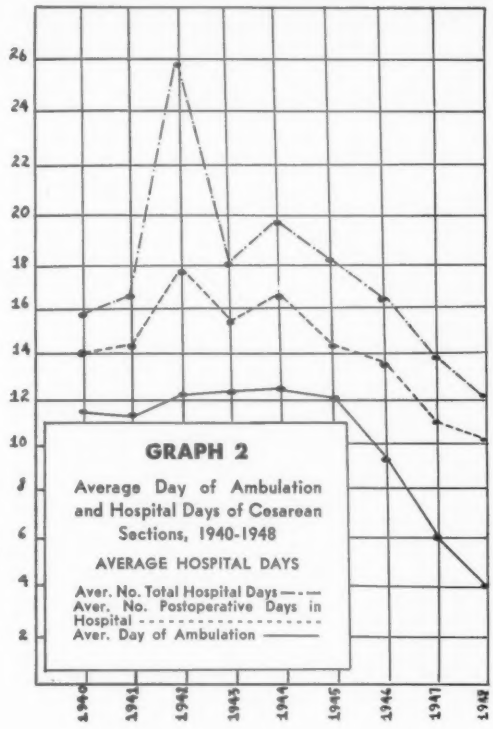
decrease in the percentage of classical (low) sections. There have been no extra-peritoneal sections done since 1943.

The average number of hospital days depends, of course, to a large extent upon the number of complications, morbid and non-morbid. However, the average hospital stay in cases of cesarean section is shown to be proportional to earlier ambulation, as well as inversely proportional to the number of cases having no complications. (See Graph 2.)

Summary

1. A review of 391 cesarean sections performed at the New York Infirmary is presented, covering the nine year period from 1940 to 1948.





2. The incidence of cesarean sections of the total deliveries for the nine year period was 4.61 percent.

3. The maternal mortality following the operation was 1.53 percent. The uncorrected mortality (including stillbirths and neonatal deaths) of infants delivered by section was 8.2 percent.

4. There was a marked decrease in morbidity in 1947 and 1948 which corresponded to the progressive increase in the use of penicillin and to the decrease in low classical sections.

5. The average day of ambulation has dropped progressively since 1946.

6. The percentage of complications, morbid and non-morbid, has progressively decreased since 1946.

This study is presented through the courtesy of Wilhelmina A. Ragland, M.D., Director of Department of Obstetrics.

Journal of the
AMERICAN MEDICAL WOMEN'S ASSOCIATION

THE NEW YORK INFIRMARY: PIONEER HOSPITAL

AGAIN THE STAFF of the New York Infirmary has contributed articles for a special number of the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION. It is appropriate that this should be so at the time when we are commemorating the one hundredth anniversary of the graduation of the founder of the Infirmary, Elizabeth Blackwell, the first woman to receive the degree of doctor of medicine.

In this number we are inaugurating a series of historical articles on "Hospitals Founded by Women Physicians". They are numerous and are scattered around the globe from Sydney, Australia, to Zurich, Switzerland; from London, England, to Manila in the Philippines; from Toronto, Canada, to Vellore, India; from Seoul, Korea, to Boston, Massachusetts, to mention but a few. It is fitting that we should begin this series with the story of the New York Infirmary, the first hospital to be founded by women physicians to be staffed solely by women physicians. In this institution, now almost 100 years old, many women physicians have received training which would otherwise have been denied them; many of them have blazed new trails and pioneered new ideas. Dr. L'Esperance, herself a pioneer in the field of cancer prevention, writes in this issue on "The Influence of the New York Infirmary on Women in Medicine." Women doctors and the New York Infirmary have progressed together, the need of the former encouraging the growth and expansion of the latter. Today the need for this institution still exists and plans for a larger Infirmary are nearing fruition. —A. C. R.

* * *

The Editors welcome the opportunity of presenting this special number of the JOURNAL prepared by the staff of the New York Infirmary under the direction of its distinguished member

DR. ELSA BARTHEL, *Guest Editor*

Elsa A. Barthel was graduated from Cornell University Medical College in 1920 and has been in active practice since that date. A diplomate of the American Board of Dermatology and Syphilology, her practice has been limited to that specialty, but this has not kept her from maintaining a keen and general interest in medicine as a whole.

Dr. Barthel is Attending Physician of Dermatology and Syphilology at the Skin and Cancer Unit of the New York University and Associate Director of one of the outpatient services of this clinic. As visiting dermatologist at the Otisville Tuberculosis Sanatorium, she makes frequent visits to that institution.

Ever since her internship at the New York Infirmary she has been closely associated with the hospital and is now Director of the Department of Dermatology and Syphilology. This includes hospital as well as ward services. At the present time she is a member of the Executive Board of the Infirmary, representing the Department of Medicine, a position which with her years of service to the New York Infirmary makes her an eminently suitable choice to edit this special issue of the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION.—Helen J. Neave, M.D.

WOMEN PHYSICIANS AND NURSES

ELSEWHERE IN this issue of the JOURNAL, Dr. Thelander discusses the opportunities offered women physicians to aid in the solution of the problems facing nurses today. It is singularly appropriate that this article regarding the relationships between women physicians and nurses should be discussed in this, the New York Infirmary number of the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION. For it was a woman doctor, Elizabeth Blackwell, the founder of the New York Infirmary, who first in this country realized that the care of the ill required special training. Because of her association with Florence Nightingale, while in England, Dr. Blackwell had a premature impression of the importance of good nursing care of the sick. "One of my most valued acquaintances", she wrote in *Pioneer Women*, "was Miss Florence Nightingale. To her, chiefly, I owed the awakening to the fact that sanitation is the supreme goal of medicine, its foundation and its crown." Largely because of her association with Florence Nightingale, Elizabeth Blackwell in 1857 incorporated into her new hospital the third of her three objectives: "to form a school for training nurses." The annual report for 1857 announces: "Two respectable women have been admitted to receive practical instruction in nursing." Among the first nurses sent to Washington during the Civil War were some of the students of the Infirmary, one of whom died in the service of the hospital to which she was attached. While schools of nursing formed later gave more extensive courses under the plan of Florence Nightingale, it is believed that the three months course in nursing at the New York Infirmary was the first training school for nurses in America.

When the catastrophe of the Civil War occurred, Dr. Blackwell and Dr. Mary Walker were among the first to offer their services to the Army and were gladly accepted for the organization of nursing. Constant applications were made at the Infirmary by women anxious to obtain some practical nursing in order to serve in military hospitals. A meeting was called for April 25, 1861, to discuss "how to consider the demand for nurses." It was unexpectedly attended by a large number of influential persons, principally ladies, and out of this meeting grew the great public meeting of women at Cooper Union and the Women's Central Relief Association. Everything relating to nurses was referred to the executive committee of the Infirmary of which Elizabeth Blackwell was chairman. This later developed into the United States Sanitary Commission, forerunner of the Red Cross.

There is a further association of women physicians with the development of the profession of nursing in the United States. In 1858, Dr. Marie Zackrzewska, a Polish doctor who graduated from Western Reserve in 1856 and became resident physician at the Infirmary, received a very advantageous offer from Boston and accepted it. She founded the New England Hospital for Women and Children and it was from this institution that Linda Richards, America's first professional nurse, graduated in 1873.

The association between women physicians and nurses therefore can be seen to date back to the very beginning of the recognition of the importance of trained nursing in the care of the sick, and the New York Infirmary has pioneered in this field as in many others. It is understandable that women physicians should be concerned with the present problems which are being presented to the nursing profession and should be interested in the fair solution of these problems.—A. C. R.

Opportunities for Women in Medicine

Our Opportunity in the Nursing Profession

An interesting little book was published just a few months ago, entitled "Nursing for the Future". It is a report prepared for the National Nursing Council by Esther Lucile Brown, Ph.D. Dr. Brown is a social anthropologist who at present is Director of the Department of Studies in the Professions of the Russell Sage Foundation.

The fact that this book is an objective study by a non-member of the nursing profession has distinct advantages. (It may have some disadvantages.) The book orients the nursing profession to other professions, medical and otherwise. The first chapter gives in brief review the trend in the health services and the type of expansion that is taking place. This is done as background for the role of the nurse in the expanding field of health services. To quote from it: "The pendulum has begun to swing farther in the direction of health; of emphasis upon the 'normal' person, and sickness as a deviation from the normal; of an understanding of the emotional factors which are a component —if not the cause—of disease; of the responsibility of the health professions in aiding persons, individually and groupwise, to maintain positive health." From here the author develops the future demands for nursing care. As a background for the present shortage of nurses she not only mentions such factors as remuneration and working conditions but stresses a point that is generally omitted. She calls attention to the anomalous position of the nurse in the health field. "Hospitals predominantly are operated on the authoritarian principle rather than of a co-operative team relationship. The nursing service is caught between the authority exercised by the medical administration on the one hand, and the hospital administration on the other. Rarely, in fact, is she accorded so much as the prestige of being considered the colleague of the physician. She is primarily a person who takes and carries out orders." . . . "Can anyone calculate the damage to a more sturdy development of the nursing profession than has come from that one little symbolic act of men physicians permitting or expecting women nurses to hold doors open for them to pass through? If the reader thinks such matters unimportant he should see the emotional satisfaction of nurses in a hospital where a particular physician habitually opens the door, turns to the nurse with a charming smile, and says 'After you, my dear'; and where another doctor attempts to overtake a nurse with a heavy tray in order to carry it down the corridor for her. Just because doctors have been so badly conditioned that they are often unaware of those who work in closest contact with them as human beings, it is not surprising that they have largely overlooked the significant role that nurses might play in psychotherapy."

In contrast to this the author notes that "Anyone who has sat observantly in the office of the director of nursing service of a five-hundred-bed general hospital, let us say, can scarcely fail to be impressed with the size of the job of operating such a service. The director occupies a position that a well-administered industrial plant or department store would rank very high in salary, prestige, and amount of attached professional and clerical assistance. Rarely has the director of nursing service achieved comparable recognition."

In another chapter the author compares the nursing services to that of engineering services in their differentiated functions. She notes that there are professional engineers, engineering technicians, trade schools and technical schools to provide for artisans in engineering, etc., and she suggests that nursing be developed more along these lines than along the traditionally professional lines. Thus it should be possible to have not only the professional nurse but the practical nurse and other personnel, all of whom in different capacities serve the well-being of the patient in the hospital.

The final half of the book is devoted to the professional nurse, the development of the nursing school as a professional school on a par with other departments of the university, rather than apprentice work in hospitals. Considerable space is given to this aspect of the nursing problem. I am sure in this struggle of the nurses the women physicians can take an intermediate stand and help the women in the nursing field to obtain a final deserved status. Why should not the staff of a hospital when meeting to discuss policies include all of the heads of departments, administration, nursing, professional, social workers, rehabilitation workers, and the like? Only when we thus work together can we hope to give the complete adequate services to the patient. Physicians have been entirely too exclusive.

H. E. Thelander, M.D.

Influence of the New York Infirmary On Women in Medicine

Elise S. L'Esperance, M.D.

WHEN ONE realizes that it is only one hundred years since the first woman was granted a degree from a medical college in the United States, and that today we medical women stand on an equality with all members of the medical profession, it is pertinent that we of this age pause and review some of the earlier hazardous years and visualize, if possible, the personalities and events of this amazing century which have gradually created and established our firm position today.

When in 1847, a shy, dignified and cultured girl determined to study medicine, the physicians of that day were horrified. Although women had practiced midwifery for many years, yet no approved medical college would accept a woman student. By sheer perseverance and determination, Elizabeth Blackwell, through a prank among the students, was eventually permitted to enroll in the Medical College of Geneva, New York, now known as Hobart College.

You are all familiar with the story of those eventful years, when by her poise and brilliant mind she established a record of scholarship that received the highest, though grudging, commendation of faculty and students alike when she graduated in 1849.

In 1851 Dr. Blackwell, after two years study abroad, made one of the hardest decisions of her career when she determined to return to America and establish herself in New York. Her first office was on University Place, but patients were few, and the medical profession distrustful. Her application to be admitted as one of the physicians in the women's department of a large city dispensary was refused and she was advised to open her own dispensary. However, a series of lectures she delivered in the spring of 1852, on the physical education of girls, gave Dr. Blackwell her first opportunity in practical medical life. The attendance consisted of intelligent ladies who were members of the Society of Friends, and her practice became very much a Quaker practice. This series of lectures was published under the title: "The Law of Life In Reference To The Physical Education of Girls."

Talk delivered on June 19, 1948, in Chicago, on inauguration as President of the American Medical Women's Association.

The book was favorably received by the medical profession and was commended by Mr. Ruskin. Finally in 1853, encouraged by her friends, a small room was engaged near Tompkins Square but this was found inadequate and she moved to 150 Third Street.

During the following two years several events of great significance occurred. First, in 1854 an "Act of Incorporation for an Institution" where women physicians could be available for medical treatment of the poor was obtained, and a few well known citizens consented to act as Trustees. The second most important event of this period was that her younger sister, Dr. Emily Blackwell, who had graduated from the Medical College of Western Reserve University in Cleveland, joined Elizabeth in New York. With her excellent two years surgical experience acquired while an assistant to Sir James Simpson in Scotland she completed the staff of the new dispensary.

As assistants were scarce at this time, it was a great joy to Dr. Elizabeth when a young Polish Woman, Dr. Marie Zackrzewska, came to her in New York. A medical degree was required before she could become a member of the staff of the dispensary, and through the influence of Dr. Elizabeth Blackwell she was admitted as a student in the Medical College of Western Reserve University and was graduated in 1856. (At that time it required but ten months to receive a medical degree.) The effect of these events on the

Dr. Elizabeth Blackwell

future of women in medicine is shown in the development of the New York Infirmary.

In 1855 Dr. Elizabeth Blackwell gave a drawing-room address on the medical education of women, stating that this pioneer movement was a revival in advanced form of work in which women had always been engaged, but in a form suited to the enlarged capabilities of women. This clear perception of the call for women to take their share in human progress has led us to insist upon full and identical medical education for our students from the beginning in America, and later in England. This characterizes her entire theory concerning the founding of an institution for the training of women. Thus in 1856, with the addition of Dr. Emily Blackwell and Dr. Zackrzewska, Dr. Elizabeth Blackwell was able to make another advance step by renting a house at 64 Bleecker Street which was fitted up as a hospital where both patients and young assistant physicians could be received.

This institution under the name of the New York Infirmary for Women and Children was formally opened in May 1857, by a public meeting at which Dr. Henry Ward Beecher, Dr. Elder of Philadelphia, and the Rev. Dr. Tyng, Jr., warmly supported the movement. The staff consisted of Dr. Zackrzewska as resident physician and Dr. Emily Blackwell in charge of surgery. This was the first attempt to establish a hospital exclusively for women and staffed by women; and naturally it excited much opposition. Although several medical colleges admitted women students there was no hospital where these medical women could obtain practical instruction.

The objections raised to such an undertaking were enough to discourage anyone except these three intrepid souls to whom we owe so much. Eventually through the courage and influence of these pioneer women a Board of Consulting Physicians was formed and men of high standing were persuaded to give their sanction: Dr. Valentine Mott, Dr. Willard Parker, Dr. R. S. Kissam, Dr. Isaac E. Taylor, and Dr. George P. Camman.

The financial situation of this infant prodigy was precarious, and rested mainly on receipts from an annual bazaar. Slowly but surely, experience proved that a special women's hospital was essential for the training of medical women to take their place with their colleagues, and the New York Infirmary gradually enlisted the support of influential men and women.

In 1858 the pioneer work for medical women in New York seemed definitely established, and on the urging of her friends, Dr. Elizabeth Blackwell returned to Europe, where she delivered a series of addresses on the progress of women in medicine in the United States. It was during this visit that Dr. Elizabeth Blackwell was recognized as the first woman physician in England to be enrolled in the Medical Registry, of January 1, 1859, in London. While Dr. Elizabeth was in Europe, the finances of the Infirmary had made such satisfactory progress through the active support of such staunch friends as Stacy B. Collins, Robert Haydock, Merritt Trimble, and Samuel Willetts, that the newly created Infirmary was able in 1860 to purchase a house at 126 Second Avenue. This was reconstructed to the use of the hospital and dispensary with accommodations for several medical interns. In the meantime Dr. Zak, as she was affectionately called, had gone to Boston to organize a new hospital there, known later as The New England Hospital for Women and Children. A whole story could be written about this remarkable Polish woman, who in the

space of a few years was able to absorb much of the energy and vision of Drs. Elizabeth and Emily Blackwell and develop a courage and organizing ability which made her one of the outstanding medical women of New England. Her departure from the Infirmary staff was keenly felt. However, when Dr. Elizabeth Blackwell returned to the Infirmary she augmented her staff by graduates from the Woman's Medical College in Philadelphia, who came for practical training.

This increase in assistants enabled the Infirmary to establish a "sanitary visitor" to visit poor patients in their homes. The first appointee to this post was Dr. Cole, an intelligent young colored physician, who by her tact and care in this work demonstrated the usefulness of such a service and its value in every hospital. Later it became a permanent department in the Infirmary under the title of "Out Practice" and remained an active branch of the service until 1940.

In the midst of all this activity and the success of women in medicine, both in private practice and the hospital, the Civil War occurred. In 1861 Dr. Elizabeth Blackwell immediately considered means by which the Infirmary could render assistance in the war effort. The need of training nurses for the care of the sick in hospitals had been realized as early as 1856. Therefore, Dr. Elizabeth readily appreciated the necessity of trained nurses for the battlefield and she organized the Ladies' Sanitary Aid Association whose function was to enlist, train, and forward volunteers to the war front. These volunteers received theoretical instruction at the Infirmary and a month's practical training in the wards at Bellevue Hospital before they were sent on to Washington. This small beginning in the systematic training of nurses was developed to a high degree during the succeeding years, culminating in the Training School for Nurses at the Infirmary in 1872.

Following the Civil War it was found that the increased service at the Infirmary could not be staffed adequately by young women physicians whose theoretical training had been received at medical colleges elsewhere. So in 1865 the Trustees of the New York Infirmary applied to the Legislature for a charter conferring college powers on the New York Infirmary for Women and Children. This college was to give a full course of instruction of three graded years and would require definite premedical preparation. A chair of hygiene was to be added, the first of its kind in any medical college in the United States. A compromise was necessary on the three years course,

© Julian Messner

Dr. Emily Blackwell

because no other college of that day had those requirements. Therefore, the two year course was made obligatory and the third year optional. In 1876 the three year course was made obligatory. The premedical preparation was gradually increased until only Harvard and a few endowed institutions maintained such standards. Yet the Infirmary survived and better trained medical women were graduated.

Another important innovation in the Infirmary Medical College was the establishment of an Examining Board, exclusive of the teaching staff, which would give the examinations before graduation. This Board was composed of well known members of the medical profession from other colleges and cities and contained names of some of the most distinguished physicians of that day.

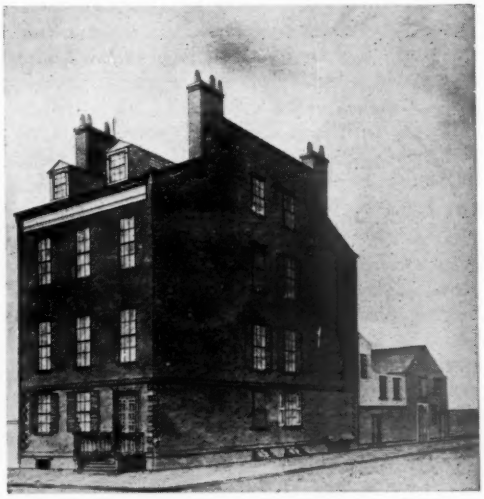
In 1869 the New York center for medical training in the Infirmary was so well organized that Dr. Elizabeth determined to return to England to ascertain the progress of women in medi-

cine there. She never returned to active practice in the United States, and Dr. Emily Blackwell assumed the responsibilities of the first medical center established in this country. For with the addition of the Medical College to the New York Infirmary there was initiated the first practical demonstration of the importance of the close association of a medical college with a hospital.

Although Dr. Emily Blackwell's contribution to the success of the New York Infirmary was not so spectacular as that of her older sister, still she brought to this young hospital and college an executive and medical ability that was unsurpassed by the best medical men of the day. Five years younger than her distinguished sister, she had determined to study medicine at the age of 18. After a year at Rush Medical College in Chicago she was graduated from Western Reserve Medical College in 1854 with high honors. She was a scholar with a keenly developed sense of organization and unusual ability to select the most promising young medical men as members of the faculty. In this way there was built up a teaching personnel comparable with the best medical colleges of that day.

It was her quiet, efficient leadership that placed the New York Infirmary and College for the medical education of women in the front rank of medical institutions in this country in thoroughness of the methods of instruction. Dr. Stephen Smith, a fellow student at Hobart with Elizabeth Blackwell and a long time friend of both sisters and the Infirmary, said: "For upwards of a score of years I was one of the Committee of Examiners of the graduating class and at the same time professor in a college where only men students were admitted. As to the qualifications of the two classes, both technical and practical, the graduating classes of the New York Infirmary generally averaged higher and the best qualified medical graduate I ever examined was a young Chinese woman educated at the New York Infirmary, Dr. Yei Men Kum." It is doubtful if any medical college of that day had adopted so rigid a standard of preliminary training before admission to classes or graded its curriculum so severely.

Much of the credit for this high standard of medical teaching should be given to Dr. Emily Blackwell, who from 1869 to the closing of the College in 1899 was dean of the medical school, professor of obstetrics and gynecology, president of the Medical Board, and a member of the Board of Trustees of the Infirmary. All of these arduous duties she performed with skill, dignity, and superb poise. The first class was graduated in 1870, five fine women who reflected credit on their alma mater. Among them was Elizabeth Cushier, who after two years of postgraduate studies abroad became resident physician at the Infirmary. Later, she was appointed professor of obstetrics and remained on the staff for 25 years.



The New York Infirmary in 1887 at 64 Bleeker Street.

In 1871, Dr. Mary Putnam Jacobi who had received her degree from the Ecole de Médecin, Paris, returned to New York and became one of the instructors at the Infirmary College, eventually advanced to occupy the chair of materia medica and therapeutics, and remained associated with the College until 1888. Her zeal and initiative were an inspiration to the students and faculty and her constant effort was to advance the training and extend the scientific knowledge of women in medicine. Her influence on the students who were fortunate enough to study under her left an indelible imprint of high medical attainments.

In 1877 a review of the activities of the college graduates showed sixteen engaged in hospital work or as resident physicians in the large women's colleges. Seven had continued their studies abroad, four had gone as medical missionaries to China, and one had established in China a hospital for women which was exerting wide influence. Two passed successful examinations for Mount Sinai Hospital, and one received the appointment.

In 1876 the Infirmary was removed to No. 5 Livingston Place, which made it possible to extend the college facilities to the entire building at 126 and later at 128 Second Avenue. This expansion only served to meet the needs of this growing institution for ten years, and in 1886 the expanded medical courses made it necessary to sell the Second Avenue properties and purchase the land at the corner of 15th Street and Livingston Place. With this added space an extension of the curriculum and a longer college year were possible. In 1893 the four year course of instruction was inaugurated. This greatly increased expenses and it was decided to meet these by an appeal for an endowment fund. Before this could be carried through, the entire college building was destroyed by fire in 1896. Plans were formulated immediately to rebuild and in the following winter the new fireproof college building was ready for students. There was some compensation for this disaster in the extended opportunities for study in the pathological, physiological, and chemical laboratories.

We as students greatly appreciated the new building and fine laboratories. I was a student in the College at that time and for thoroughness our staff of faculty members could not be equaled: Dr. Martha Wollstein in pathology, Dr. Helen Baldwin in medicine, Dr. Emily Lewi in physical diagnosis, Dr. Annie Daniel in pediatrics, Dr. Elizabeth Cushier in obstetrics, Dr. Alice Wakefield in anatomy, Dr. Gertrude Kelly in surgery, to mention only a few of the graduates of the Women's Medical College of the New York Infirmary who became instructors and professors and through their association at the Infirmary, the leaders of the future women in medicine.

Among the distinguished alumnae, I will mention a few of those who have finished their work here and passed on.

Dr. Annie Sturgis Daniel, one of the youngest and earliest graduates from the Infirmary (1879), in 1881 was placed in charge of the newly organized "Out Practice Service," and for sixty years filled the position with efficiency and medical acumen that was an inspiration to those who served in this active field. She won the love and respect of the entire Lower East Side and taught many an aspiring young medico how to meet emergencies in the home. She was keenly alive to the progress of medicine, with a brilliant mind which became interested especially in preventive medicine. She lived modestly and quietly close to the people whose welfare was of paramount importance in her life. Her impact on the social aspects of medicine in New York was so far reaching that it led to many reforms in the sanitary conditions of the tenements.

Another famous graduate was Elizabeth Burr Thelberg, of the class of 1884. She was professor of physiology and hygiene at Vassar College for forty years. Her activities were an inspiration to medical women everywhere and her occupation with sociological affairs was characteristic of the influence of the Blackwell institution with its emphasis on hygiene and preventive medicine.

Dr. Martha Wollstein, who was instructor in histology and later in charge of the important Department of Pathology, received her degree in 1889. Her broad knowledge of this relatively new subject created a spirit of enthusiasm in microscopic studies that left an indelible mark on all the students. During her service as pathologist at the Babies Hospital she published a monograph on Congenital Tumors in Infants which formed the basis of a re-classification of this type of neoplasm. Later she became assistant professor of pathology and diseases of children in Columbia University College of Physicians and Surgeons.

One of the strongest supporters of the Infirmary was Dr. Helen Baldwin, a New Englander with the rugged qualities of her Yankee ancestors. She received her degree in 1892 and had the distinction of being the first woman to study under the four brilliant leaders at Johns Hopkins Medical School: Dr. Osler, Dr. Welch, Dr. Halsted, and Dr. Kelly. She returned to the Infirmary in

THE NEW YORK INFIRMARY FOR WOMEN AND CHILDREN
126 Second Avenue, New York City
1861 - 1874

1896 as assistant in medicine, eventually becoming director of the department and rounding out forty years of active service there. Her wise counsel and untiring efforts were a vital influence in maintaining the high ideals of the New York Infirmary, and it was a privilege to share her friendship.

Dr. S. Josephine Baker, one of the outstanding graduates of the Infirmary, received her degree in 1898 and early became interested in child hygiene. She was made Director of Child Hygiene in the New York City Department of Health and filled the office so efficiently that this Department served as an example in cities and states all over the country. She was a lecturer on this subject at Columbia and New York Universities and consultant in Child Hygiene for the United States Public Health Service. Her work in establishing the Bureau of Child Hygiene as a separate department of Public Health reflects the emphasis on hygiene characteristic of the Medical College of the New York Infirmary. She was a vital leader with a charming personality and one of the brilliant medical women of our time.

There were many other brilliant, capable women who owe the New York Infirmary a debt of gratitude for the firm foundation in scientific medicine they received there and whose names and the value of whose work are written in the annals of every country.

The Class of 1899 was the last to receive an M.D. degree from the Infirmary College, for in 1898 Cornell University established its Medical College in New York City to which women students were admitted in the second, third, and fourth years.

Dr. Emily Blackwell was able to make the momentous decision to close the Women's Medical College of the New York Infirmary. A woman who through thirty years of intensive effort had built up a medical college the equal of any in the United States, who in the early hazardous years succeeded by faith and personality in attracting a Board of Trustees from among the most influential men in New York City, she had formed a medical faculty that was acceptable to the new Cornell University Medical College, and had trained young women so well that they were able to enter the various classes of that College, yet she was willing to close this successful institution as soon as wider opportunities in medicine seemed open to women. Just that one act will illustrate in some measure the courage and vision of this heroic medical woman. She had once said: "The moment the College of the New York Infirmary ceases to give the best medical education a woman can receive, that moment it ceases to exist."

Dr. Gertrude Kelly for many years director of surgery at the Infirmary and assistant professor at the College described Dr. Emily, "I have never known man or woman with a clearer brain or saner judgment, a wider outlook or more whole hearted devotion to the progress of women than Emily Blackwell."

With the closing of the College the students were admitted to Cornell Medical College to complete their courses, after which their association with the Infirmary was through the hospital where they served as interns or on the clinic staff of the dispensary or as members of the medical staff.

The increased space made available by the closing of the College gave opportunity to expand the hospital facilities into the College building and all efforts were directed towards transforming this building into the most adequate and best equipped hospital of the time. For both Elizabeth and Emily Blackwell felt that the ultimate need for women in medicine would be for hospital facilities and that these opportunities, although desirable in a large hospital, could never quite replace the definite advantage to be obtained in an institution where medical women can become heads of departments and learn to bear the responsibility of hospital services. They never suggested segregation of women. On the contrary they always favored a co-educational, co-operative basis for all in the medical profession. They visualized what is gradually taking place today; that is, the increase of opportunities for women for services in large hospitals. But this should not minimize the necessity or value of smaller institutions.

The New York Infirmary, one of the few women's hospitals staffed entirely by women physicians, is still at Livingston Place and 15th Street, crowded to capacity, with inadequate space to expand. But with all the courage and vision of the earlier founders, we are now planning to build a new hospital on this site in the next two years. We are convinced that there is a definite need for this institution. Here there is opportunity for a woman to carry out a project or vision or a piece of clinical research without interference or hindrance. That is one reason why the first Strang Cancer Prevention Clinic was established here.

It was a cautious experiment and it required three years to demonstrate its value sufficiently to be able to organize a similar clinic in Memorial Hospital Cancer Center. That small beginning could not have reached the present proportion without the experimental work of those three quiet struggling years at the New York Infirmary. Now with over two hundred such cancer prevention and detection clinics throughout the United States we are apt to forget that this recent advance in preventive medicine was born at the New York Infirmary in No. 5 Livingston Place where Emily Blackwell maintained a small hospital from 1870 to 1899.

The splendid medical women of the New York Infirmary are largely responsible for my early medical career. Their dignity, earnestness and courage had a tremendous influence on an impressionable young woman. They taught me patience and a stubborn tenacity of purpose which is a valuable asset in any chosen field.

Let us for a moment glance backward at the really outstanding early achievements of this historic old Infirmary, in order more fully to appreciate the wide influence it has had on all of us. It was established by the first woman to receive a medical degree and was the first hospital especially staffed by women for women. Its Medical College was the first to require any premedical training and the first to offer a three year course in medical education. It established the first chair in hygiene, and the first "Out Practice," the forerunner of the extern service of today.

The idea of special hospital training for nurses was born here and became a full fledged training school for nurses in 1872. It has always been the pioneer in preventive medicine and as that particular branch of medicine is assuming a place of importance in medical education today, there is a real opportunity for an expanded new Infirmary to carry on the traditions of its past.

The influence the New York Infirmary has had on women in medicine rests on the faith, courage, and vision of Elizabeth and Emily Blackwell, who in establishing this institution elevated women to the high position they occupy in the medical profession today. The foundations they laid with so much care, skill, and sacrifice, that have stood for nearly one hundred years as a standard equal to the best institutions of the day, should give us a deep sense of humility and gratitude and at the same time inspiration for higher and wider accomplishments.

The New York Infirmary today

The future rests with us all. Each generation must contribute its share to our progress. If this hour of remembrance of the activities of this grand old institution should arouse some enthusiasm among you for the traditions of the past and a realization of the need, not of segregation in the medical profession, but of sincere co-operation among the different groups in medicine, a realization, also, that we, as a minority, have problems peculiarly our own and therefore need the American Medical Women's Association as a place to renew our faith in each other, to stimulate our respect for the achievements of medical women, to recognize the needs for our future opportunities, to develop some of the courage and vision of these pioneer women, Elizabeth and Emily Blackwell who "lived in the attic and dined in the cellar" to accomplish their purpose, then the future of women in medicine is assured.

BOOK REVIEWS

HANDBOOK OF DISEASES OF THE SKIN. By Richard L. Sutton, M.D., Emeritus Professor of Dermatology and Syphilology, University of Kansas Medical School; and Richard L. Sutton, Jr., M.D., Associate Professor of Dermatology and Syphilology, University of Kansas Medical School. Price, $12.50 pp. 749. Illustrated. The C. V. Mosby Co., St. Louis. 1949.

In his preface Dr. Sutton states that one of the aims of this handbook is brevity and practicality for the student, general practitioner, and specialist alike. He has succeeded admirably in this endeavor as the format of the book is unusual and lends itself to quick reference reading. Concise chapters are devoted to anatomy, pathology, symptomatology, etiology, and treatment. In the section on treatment, the more commonly used dermatological drugs are listed and a brief outline of their properties is given. The chapters on the various dermatoses are written and set up in such a way that the common diseases are in regular print with heavy headings, while more detailed information and rarer diseases are printed in fine type. No disease entity, no matter how rare, has escaped mention. Thus the general practitioner can obtain a quick description of any dermatosis, and the specialist may find further details and references in fine print.

The section on dermatoses due to animals is especially full and should be of interest to any doctor regardless of specialty or geographic locale. Many of the newer entities are described, including the rickettsial diseases. Brief mention is made of much current investigative work, and some of the more recent treatments of the Lupus Erythematosis and Scleroderma group are discussed.

Throughout, abbreviated references are interpolated in the text for the benefit of those wishing more detailed information, while at the end of some of the sections are found further bibliographies. Over one thousand well chosen and modern illustrations are closely integrated with the text so that the disease descriptions and picture are placed in apposition.

—Helen J. Neave, M.D.

HUMAN BIOCHEMISTRY. By Israel Kleiner, Ph.D., Professor of Biochemistry and Director of Department of Physiology and Biochemistry, New York Medical College, Flower and Fifth Avenue Hospital; formerly Associate, The Rockefeller Institute for Medical Research, New York. Second Edition. Price, $7.00. Pp. 649. Illustrated. The C. V. Mosby Co., St. Louis. 1948.

This is a practical and useful book for the practitioner as well as for the student. Instead of considering physiological chemistry as a course in pure science, the clinical applications are made with the consideration and information of the phenomena covered in the subject. Therefore, human biochemistry is part of the practice of medicine, rather than an isolated basic science. In other words, the gap between pre-clinical and clinical study is well bridged.

There is an introduction, a chapter on physical chemistry, followed by a chapter for each of the chemical constituents of food. Then tissue composition, milk, blood, enzymes, foods, and vitamins are discussed. Digestion, physiologic oxidations, nitrogen, carbohydrate, mineral, lipid, and energy metabolism, and water balance are covered. The chemistry of respiration, urine, and hormones, and changes in blood chemistry are carefully elaborated, and the last chapter takes up recent clinical applications. The book is amply supplied with illustrations, some in color, and charts and tables. Although it contains a great deal of information, it is not a ponderous book, and it provides an easy and ready source of basic reference material.

—Leoni N. Claman, M.D.

OPERATING ROOM TECHNIQUE. By Edythe Louise Alexander, R.N. Second Edition. Price, $10.00. Pp. 765. Illustrated. The C. V. Mosby Co., St. Louis. 1949.

This is a valuable compilation of information on operating room technique for all nurses engaged in such work, whether directing, teaching, or studying operating room technique. It begins with the fundamental principles underlying procedures carried out in the operating room, and then progresses to detailed descriptions of individual operations. Specifications for equipment for the operating room and for each operation are given, accompanied by illustrations. In all, the book contains 668 fine illustrations which aid in simplifying the steps of procedures described. Linens and instruments used for operations are enumerated and supplemented by instructions for their preparation prior to the operation as well as for their cleansing and sterilization after use.

An extensive list of major and minor operations adequately covers the subject from the point of view of the operating room nurse. Included are definitions of operations together with a brief review of the anatomy of the parts involved and a list of the instruments and suture materials used. The positions of patients for operations, the preparation of the parts to be operated upon, the draping, and the steps of the operation from incision to closure are listed in the descriptions and are frequently illustrated by photographs. Although the specialties in surgery are covered, it is interesting to note that surgery on the eye has not been included in the scope of this work.

The teacher of operating room technique will find in this book a well documented authority for the content of her course, and she will want the book available to her students for reference. The bibliography at the end of each chapter will be found useful for further reading. An outline for a course of lectures in operating room technique and sample records for registering the experiences and progress of students are included. The operating room supervisor will find the book valuable because of the details given upon equipment, contents of packages and sets, and the conditions of sterilization for the multiple pieces of equipment used. There is a chapter devoted to the standardization of duties of the different operating room personnel who make up the team necessary for smooth functioning. No doubt most supervisors will want to include this volume in the ward library.

In the opinion of the reviewer, Miss Alexander has made a very important contribution to the technical books available to the nursing profession by compiling various pertinent material in one source. Every nurse who is engaged in operating room work, at whatever level, will appreciate having so much information available in one volume.

—Dorothy Terry, R.N.

Medical Service of the A M WA

The American Women's Hospitals in Holland

In the American Women's Hospitals report published in the March issue of the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION, mention was made of the funds contributed by members of the A.M.W.A., to be used in Amsterdam for the entertainment of delegates to the International Congress. Owing to the generosity of the Dutch people these funds were not used, but could not be returned on account of the legal blocking of out-going funds.

These funds were purchased by the American Women's Hospitals Committee and assigned for medical service in Holland through the Netherlands Medical Women's Association, and through that group were designated to be used in medical relief work, most of which was for child guidance and the care of children suffering from emotional disorders due to the personal tragedies of war.

Letters of apreciation acknowledging this have been received from the institutions benefitted.

The American Women's Hospitals in China

In a letter just received from the local representative of the West China Union University and Hospital the following comment appeared:

"Word from West China Union University where there has been no Communist domination shows the work is going on with the usual intensity and effectiveness. Even at Yenching University, which has been in the hands of the Communists for several months, there has been no interference with the academic work and arrangements have been made for the sending of U. S. dollars for carrying on the work of the University."

The American Women's Hospitals in Germany

In the May issue of the JOURNAL OF THE AMERICAN MEDICAL WOMEN'S ASSOCIATION reports and letters were published regarding A.W.H. activities in Germany.

Since that time further communications have been received, including letters and excerpts from letters from women physicians in Germany who have received food distributed by our Committee operating in the Munich district, American Zone.

April 10, 1949

To the American Women's Hospitals Associations:

Just in time for Easter I had the great joy to receive a parcel with food from you via Arztinnenbund in Munich. I want to tell you how very happy I was about this so unexpected help, and even more about this wonderful gesture of humane feeling in times of danger and misery.

I had a big practice for children in a place near Berlin and had to leave my home and work when the Bolshevists entered my town. I am by birth German-Baltic, born in Russia, and the Bolshevists claim all persons born in Russia to be their subjects. They force them to go back to Russia. My family lost already members, murdered by Bolshevists at the beginning of the Russian revolution. Thus I knew what it means to be sent to Russia. I had therefore no other choice but to leave. I had the luck to escape in two dark nights with my small car to Western Germany, taking with me two children and two employees. Of course I lost all.

I am living now in the Bavarian hills. After three years when I had no possibility to find any work I have now got the permission to settle in a lovely small place near Garmisch as children's doctor, but I couldn't begin my work because I could not find the smallest room for my practice. The place is overcrowded with fled people. But I am trying hard not to lose courage and hope. I am very fond of my profession.

In the meantime I am writing a small book of pregnancy and baby's first year. I am now especially grateful for the fine coffee you sent me; we often feel very tired in these last years and your coffee will keep me fresh and ready to work and will give me good ideas.

Please take these few words as a sign of real thankfulness for the material help as well as for the spirit of true humanity which are a great comfort and joy for me.

Yours sincerely,
Dr. E— F—.
Uffing.

April 20, 1949

Dear Dr. Lovejoy:

Before Easter I distributed 30 food parcels among 45 single doctors and families.

Academicians in Germany all are poor now and we can not take great duties from our membership, a great deal can not pay at all; therefore the committee of our "Arztinnenbund" does the work of administration as far as possible itself. A colleague translated during the holidays the most characteristic passages of the Thanking-letters I received till there. If you should like it better, I shall let translate the whole letters by an interpreter.

Doubtless you have given a great help and a great joy to a lot of people! Every woman-doctor who has written for a parcel now has got one.

The rest (10 parcels) I shall distribute before Whitsuntide among the most poor colleagues. One of the employers has written: "We learned to be very modest always, without thinking much about, only on holidays it is hard to have nothing to arrange a little feast for the family."

With many thanks and kindest regards

Yours sincerely,
Dr. Hertha Riffeser, President
ARZTINNENBUND
Der Amerikanischen Zone

Munchen, April 18, 1949

Dear Dr. Lovejoy:

We received now the answers from all the doctors who got parcels through us from you. Some of them I am translating partially for you so that you can see for yourself what great help and joy you have given to these poor people.

* * *

Dr. G. P., Nurelberg, . . . Your wonderful package came the very day I was leaving the hospital after being operated with appendicitis. Such a help . . .

Dr. I. F., Weiden, . . . Ever so many thanks for your tremendous gift. Such a help, especially for my two children. No news from my husband. I must save every penny because I couldn't yet pay the coal bill of last winter, 80 D.M. . . .

Dr. A. M., Reichenhohl, . . . Your wonderful food Package was such a help. Everything was taken away from me when I was expelled from Silesia. I would be so glad for instruments for my practice . . .

Dr. I. O., Waldrensee, . . . Such a wonderful Easter present for my children and a great unexpected help . . .

Dr. A. S., Rossadi b/Coburg, . . . Such a great joy, the first time I get any help. My whole family is outbombed, my two sisters both lost their husbands in Russia and must take care all by themselves for their children. My husband is high-frequency technician and lost work after the money-devaluation. He works now in Frankfort for 60 D M per week which must be enough for our two households with three children. I am lame after poliomyelitis, have to use a prothesis, can't get medical work and am trying to earn some money with knitting but can't sell since the D mark, because machine baby things are cheaper. I can't buy proper food for the children, not even the ration card, only potatoes. Now you can imagine what a heavenly gift your package was, chocolate for the children for Easter and I am even able now to make them some cakes. I am deeply moved and thank you from all my heart . . .

Dr. O., Birnbach, . . . Thank you for your Easter gift. So happy for this sign that we are not totally forgotten . . .

Dr. M., Mindelheim, . . . Received the 1st food package in my life and above every thing it shows understanding and feeling, and makes one feel a member of such an international circle . . .

Dr. I. A., Reidienhall, . . . I lived for two years in Silesia under the Polish occupation and came to Bavaria with my children and myself being sick. Under such circumstances any help is doubly appreciated . . .

Dr. J. A., Dadisstadt, . . . I thank you even more for my children than for myself. Especially for the well fitting overcoat which was so needful during the cold . . .

Dr. E. B., Tubingen, . . . I want to thank the American Women doctors for the open hearted cooperation and help . . .

Dr. L. G., Turkheim, . . . Many thanks for the grand help which will also greatly benefit our son going to school in Stuttgart which is economically very difficult for me . . .

Dr. C. H., Winterschneidbade, . . . lost everything when I had to leave Strassbourg. Therefore the coat and food were a great help . . .

Dr. M. M., Augsburg, . . . Thanks for all the beautiful things, especially the soap. If you could have seen my four children when the package was opened I am sure you could feel compensated for your many gifts. "The Lord always opens a door when we think we are at the end" . . .

Dr. L. H., Inzell, . . . Your package arrived just in time for the confirmation of our two eldest children and gave us great joy. It is rather difficult to give any pleasure to five children besides the direct necessities . . .

Dr. M. R., Bade, . . . You have given us great joy, but even more to our four year old son, who has never seen most of the nice things you sent . . .

Dr. E. K., Unterschonodorff, . . . Your marvelous package, the first American package ever received, made it possible for me to make Easter a real holiday for my children . . .

Dr. E. R., Freising, . . . More than anything else we appreciated the coffee which is almost medicine for my sick mother and which I am unable to afford . . .

Dr. E. L., Gars, . . . Our situation is really terrible, more so as my little boy is suffering from Tbc and your gifts are warmly and deeply appreciated . . .

Dr. M. P., Neustadt a/Main, . . . Also we have been used chiefly to herring and potatoes lately. We really went to town on all the good things you sent and felt like gourmands . . .

Dr. M. Q., Wertheim, . . . The coat fits like made to order and many "warm" thanks. I'm still awaiting the return of my sister. She is a prisoner of war in Russia since five years. God may help her . . .

Dr. J. A., . . . Ever so many thanks for the package. It was a great joy for the children, especially since one daughter receives the first holy Communion this Easter . . .

Dr. E. S., Coburg, . . . Both my parents were very ill and I myself am an Intern without payment, so you can imagine our joy when your package arrived . . .

Dr. U. W., Gaisade, . . . Such a fine Easter present for my children. They are just mad with delight with the chocolate and the marmalade and I am so thankful for the soap . . .

We include one letter which we received and which is addressed to you directly.

Once more many, many thanks for your generous help. Yours sincerely,

Dr. Paula Mayer, Secretary

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EDITOR'S NOTE: *We would like to have notices of Branch medical meetings both before and after the meeting. These notices in advance of meetings are very helpful to those of us who have physicians from abroad and from the U. S. A. visiting us. They are all desirous of meeting with other women physicians. Also, your editor reads with envy the programs of the Branch meetings, realizing how valuable are the discussions of the subjects, especially those dealing with medico-legal problems. Your editor will welcome reports of these meetings.*—A. C. R.

News of Women in Medicine

The Sanitorium, at Castile, Wyoming County, New York, celebrated its centennial on March 12, 1949, and the townspeople paid tribute to two medical women who have directed its activities for almost a century. Dr. Cordelia A. Greene, inspired by Elizabeth Blackwell, was one of the earliest women to receive a medical degree from Western Reserve University. From 1865 to 1905 while physician-in-chief at The Sanitorium she combined professional skill with philanthropic civic activities. Since 1905 DR. MARY T. GREENE has administered the affairs of the hospital. She has endeared herself to her neighbors as she has carried on traditions initiated by her illustrious predecessor.

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DR. LESLIE KENT, recently elected President of the Oregon State Medical Society, was honored with a tea given by the Medical Women of Portland.

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A distinguished visitor to the Vanderbilt University School of Medicine, Dr. Arvid Wallgren, has left with his family for a tour of other United States medical centers. Plans are being made to keep alive the idea of visits by Swedish pediatricians to Vanderbilt, and a corresponding annual visit by a Vanderbilt pediatrician to the Royal Caroline Institute of Stockholm. DR. MILDRED STAHLMAN, assistant in pediatrics at Vanderbilt, has been designated by Dr. Amos Christie, head of the department, to spend six months of next year studying at the Stockholm medical center.

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The League of Women Voters of Montclair, N. J., was addressed March 14 by DR. MARGARET WURTZ on the proposed Federal health bill. Dr. Wurtz interpreted the American Medical Association's viewpoint.

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The New Jersey State Medical Society has named DR. ELIZABETH R. BRACKETT of Nutley a member of the Nursing and Nursing Education Sub-committee. She is also chairman of the Nursing and Nursing Education Committee of the Essex County Medical Society.

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Since the illness of the Medical Director of the Babies Hospital in Newark, New Jersey, DR. MILDRED G. GREGORY has been Acting Medical Director.

DR. ADELAIDE ROMAINE has been appointed Medical Director of the Federal Reserve Bank of New York, succeeding DR. MARY CRAWFORD, who retired on June 1, 1949.

Adelaide Romaine, M.D.

* * *

DR. DOLORES CANALES is chairman of the Spanish American Blood Bank, Banco de Sangre Ibero-Americano, which was inaugurated on April 15, at the building of the Red Cross Blood Bank Program in New York. General Walson, Administrator General of the Red Cross Greater New York Blood Bank Program, welcomed the different delegates of various Spanish and Latin American organizations of the city. Among the other speakers were Dr. Mary Boynton, Medical Director of the Blood Bank Program; Dr. J. Negrin, who represented the Society of Spanish American doctors; Mrs. J. Purcell, Recruiting Director for the Red Cross; Dr. P. Dominici, President of the New York Spanish Daily (Diario de Nueva York); Mr. A. Dares, Director of the same paper that has given full

support to the Spanish Blood Bank, and Dr. Canales.

The purpose of the Spanish American Blood Bank is to accumulate a reserve of blood large enough to cover the needs of the entire Spanish-speaking population of New York City, which numbers about 350,000 people. Almost two-thirds are Puerto Ricans, many in desperate need of such an institution. The rest includes a rather large Cuban group, and in smaller numbers, nationals of every Latin American republic, and of Spain.

Their social-economic-educational status varies enormously from very wealthy Latin American emigres or visitors; to middle class professionals, mostly professors in colleges and universities, to small businessmen, to unskilled workers.

Dr. Canales, who was in charge of organizing the Blood Bank, and who is now directing its functioning, said that the policy of the Spanish American Blood Bank would be to make blood available to every Spanish-speaking patient who needs it, regardless of whether he or she is a donor, or a member of a donor's family. They are trying to increase the deposit of blood very rapidly to the point when all needs will be met. Any physician who finds any such case in her hospital or her practice, can contact Dr. Canales directly about possible use of the Spanish American Blood Bank for her patient. Dr. Canales can be reached through the Red Cross, 4 East 37th St., New York, Tel: Murray Hill 9-1000; or directly at the offices of the Spanish Daily for which she writes a daily editorial on health: Diario de Nueva York, 378 Adams St., Brooklyn 1, N. Y., Tel: Ulster 5-5150.

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Dr. Bertha Van Hoosen and Dr. Martha L. Longstreet were speakers at a joint dinner meeting of the Zonta and Quota Clubs and Saginaw Business and Professional Women's Association in Saginaw, Michigan. Dr. Longstreet is an honorary member of Zonta Club. Dr. Van Hoosen recounted chapters in her life not included in her "Petticoat Surgeon."

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"Women Physicians and Equality for Women" is the title of an article by Dr. Helena T. Ratterman in "Equal Rights," official magazine of the National Woman's Party.

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The Michigan Alumnae Club of Chicago has awarded Dr. Vida A. Latham their 1949 citation as their outstanding alumna. Dr. Latham graduated from Northwestern University Women's Medical School in 1895 and received a D. D. S. degree at the University of Michigan. She has served on the staffs of Northwestern University Woman's Medical School and the Milwaukee College of Physicians and Surgeons.

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Dr. Renee Zindwer read a paper on "Health Needs in 25,000 School Children" at the April meeting of the Nashville Academy of Medicine and the Davidson County Medical Society.

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New York University-Bellevue Medical Center doctors appeared April 12 on the first of a series of telecasts demonstrating various aspects of research in diseases of childhood. Participating on this program was Dr. Rosa Lee Nemir who spoke on "New Developments in Tuberculous Meningitis."

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Dr. Marina Lee has returned to Nashville after a month in Caguas, Puerto Rico. Dr. Lee is a member of the Department of Pediatrics at Vanderbilt University.

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Dr. Jeannette Dean Throckmorton is rounding out twenty years as librarian in the Iowa State Medical Library.

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The Southern Medical Association will hold its annual meeting in Cincinnati November 14 to 17, 1949. Dr. Dorothy B. Worcester, Dr. Virginia Kratz, and Dr. Emily R. Hess are in charge of arrangements for women physicians.

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Dr. Marjorie Meehan and Dr. Joan Fleming have been appointed assistant clinical professors in psychiatry at the University of Illinois. They teach in the Central Free Dispensary at Presbyterian Hospital, Chicago.

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On March 30, 1949, Dr. Amelia Ziegler celebrated her eighty-eighth birthday in Portland, Oregon, where she practiced medicine for half a century. Congratulations, Dr. Ziegler!

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According to the February Bulletin of the Hospital Council of Greater New York, there are now 17,655 licensed physicians in the City of New York. On the basis of an estimated population of 7,888,000 there were 447 people for each physician. There are 1,161 women physicians, slightly less than 7 percent of the total number.

MISCELLANEOUS ANNOUNCEMENTS

COURSE IN GASTRO-INTESTINAL SURGERY

The National Gastroenterological Association, in co-operation with the Postgraduate Division of Tufts College Medical School and the First and Second Surgical Services of the Boston City Hospital, announces a course in gastro-intestinal surgery to be given at the Boston City Hospital, Boston, on October 27 to 29, 1949, under the personal direction of Dr. Owen H. Wangensteen, Professor of Surgery, University of Minnesota Medical School. Dr. Wangensteen will be assisted by Lord Alfred Webb-Johnson, President of the Royal College of Surgeons, London, the members of the surgical staff of the Boston City Hospital, and other distinguished guests. Enrollment in the course is limited to 250. The fee will be $35.00 per person. For further information and enrollment write to the National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

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THE COST OF MEDICAL EDUCATION

Citing an average loss of $1700 per student graduated from medical schools in this country above the tuition paid by the student, William B. Given, Jr., president, American Brake Shoe Company, told more than 300 businessmen workers for the New York University-Bellevue Medical Center Fund that business and industry must supplement medical school funds with company money.

"Medical schools cannot survive without adequate funds," he said. "We must go to our boards of directors, even stockholders, if necessary. In making such recommendations, we can say that there will be less security for stockholders in business investments unless there are available an adequate number of properly trained men and women from our medical schools."

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THE ACADEMY-INTERNATIONAL OF MEDICINE has compiled a comprehensive catalogue of surgical, medical, and dental films, alphabetized both as to classification and titles, including a number of foreign films. In a section devoted to Audio-Visual Services are announcements of new developments and other data of interest to those who are in charge of programs. A catalogue will be mailed to state secretaries and program chairman, upon request to Academy-International of Medicine, Department of Audio-Visual Aids, 214 West Sixth Street, Topeka, Kansas.

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COURSE IN MEDICAL MYCOLOGY

A month's course in medical mycology under the direction of Dr. Norman F. Conant is to be offered at Duke University School of Medicine and the Duke Hospital, Durham, North Carolina, during July, 1949. The course will be given every day except Sunday and has been designed to insure a working knowledge of the human pathogenic fungi within the time allotted. Emphasis will be placed on the practical aspects of the laboratory as an aid in helping to establish a diagnosis of fungus infection. Work with patients, clinical material, cultures, and laboratory animals will serve as a basis for this course. The number of applicants will be limited and the applications will be considered in the order in which they are received. Inquiries should be directed to Dr. Norman F. Conant, Duke University School of Medicine, Durham, North Carolina.

RESIDENCY IN NEOPLASTIC DISEASES OF CHILDHOOD.

Memorial Hospital, New York, has established a residency in pediatrics. The period of service is for a minimum of six months, and its purpose is to train the pediatrician in the diagnosis and management of neoplastic diseases in childhood. The resident will also participate in the research program in progress at the Sloan-Kettering Institute. Three months' credit toward pediatric residency training requirements has been approved by the American Board of Pediatrics. For particulars applicants may communicate with the Director, Pediatric Service, Memorial Hospital, 444 East 68th Street, New York 21.

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FELLOWSHIPS IN MEDICINE AT DUKE UNIVERSITY.

On July 1, 1949, there will be available several two-year fellowships in the School of Medicine. The stipends will be $2,400 the first year, and $3,000 the second year. The work, which will be under the direct supervision of a senior staff man, will include the following:

1. Special training in the subspecialty chosen.
2. Clinical and consultation practice with ambulatory and hospitalized patients, both public and private.
3. Teaching of third- and fourth-year medical students on the wards and in the clinics.
4. Clinical and laboratory research.

Only those who have completed three years of training in internal medicine, or a satisfactory equivalent, will be eligible for these positions, which have been designed to prepare the candidate for the practice of internal medicine. The following places will be available: Cardiology, metabolic diseases, hematology and allergy, hypertensive cardiovascular and renal diseases, pulmonary diseases, general internal medicine and therapeutics, gastro-enterology.

Anyone interested should write to Dr. Eugene A. Stead, Jr., Professor of Medicine, Duke University School of Medicine, Durham, North Carolina.

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PSYCHIATRIC FELLOWSHIPS

The American Association of Psychiatric Clinics for Children offers fellowships for training in psychiatry to prepare physicians for work in child guidance clinics. These fellowships are financed by the United States Public Health Service and from local funds. In addition, a few communities are offering to finance the training of psychiatrists who will engage to work for them for a given period following their training on a contractual basis. The training is in preparation for positions in community clinics where psychiatrists, psychologists, social workers, and others collaborate in the treatment of children suffering from emotional illness.

Most of the fellowships are for two years; some for one. The stipend is in the neighborhood of $3,000 for the first year, and around $3,600 for the second. The awarding of the fellowship for the second year is always dependent upon the quality of the first year's work. Prerequisites are graduation from an approved medical school, a general internship, and two years of approved general psychiatry, as well as personal qualifications essential for such work.

Further information and applications may be obtained from Dr. A. Z. Barhash, Executive Assistant, The American Association of Psychiatric Clinics for Children, 1790 Broadway (Room 916), New York.

THE NATIONAL FOUNDATION FOR INFANTILE PARALYSIS ANNOUNCES POSTGRADUATE FELLOWSHIPS.

Research

Research fellowships are available in virology, orthopedic surgery, pediatrics, epidemiology, and neurology. These fellowships are intended to emphasize (1) advanced training in the basic sciences as they apply to the particular specialty and to research, and (2) experience in research, which need not be immediately related to poliomyelitis.

Eligibility requirements: Doctor of Medicine (or when appropriate, a degree of Doctor of Philosophy); a minimum of two years of training on the residency level in the specialized field; presentation of an appropriate program of study and investigation; United States citizenship; sound health, as attested by a physical examination.

Physical Medicine

Clinical fellowships are available to physicians who wish to prepare for eligibility for certification by the American Board of Physical Medicine.

Eligibility requirements: Graduation from a Class A school of medicine; completion of a rotating internship of not less than one year in a hospital approved by the Council on Medical Education and Hospitals of the American Medical Association; license to practice medicine in one or more states; citizenship in the United States; sound health, as attested by a physical examination; age limit: 40.

Public Health

Fellowships are available to physicians for one year of postgraduate study leading to a Master of Public Health degree at a school of public health approved by the American Public Health Association.

Eligibility requirements: Graduation from a Class A school of medicine; completion of an internship of not less than one year in a hospital approved by the Council of Medical Education and Hospitals of the American Medical Association; license to practice medicine in one or more states; citizenship in the United States; sound health, as attested by a physical examination.

Application may be made to the National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York, at any time during the year. Selection of candidates will be made on a competitive basis by committees composed of specialists in each field. Awards are based on the individual need of each applicant.

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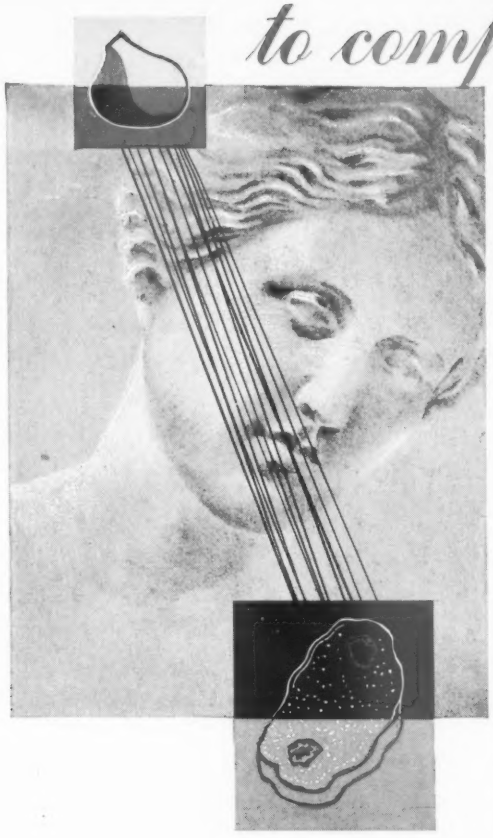

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